Editor :
Muhammad Irsal

Essentials *of* Psycholinguistics

Dr. Ramli, S.S., M. Pd. I Dr. Woro Kusmaryani. S.Pd., M.Pd.
Dr. Vivit Rosmayanti, S.Pd.I., M.Pd.

Essentials *of* Psycholinguistics

Psycholinguistics is a field that aims to understand the psychological and cognitive processes involved in language use and comprehension. By studying psycholinguistics, we can investigate various aspects of language processing, such as word recognition, sentence comprehension, and language production. Psycholinguistics uncovers the underlying mechanisms that govern how individuals acquire, understand, and produce language. Moreover, psycholinguistics plays a vital role in education, as demonstrated in studies focusing on learning strategies such as Student-Centered Learning (SCL) in the context of psycholinguistics. Educators can enhance students' understanding and achievement in studying language and cognitive processes by employing psycholinguistic approaches.

This book contains some essential topics in psycholinguistics, which can assist students in comprehending the cores of psycholinguistics. It briefly explains topics supported by current research that led the students to expose their perspectives, discuss with their groups, and complete the tasks. What is fascinating about this book is the variety of tasks like answering comprehension questions, watching a movie documentary, matching terms and definitions, and reflecting on learning through online applications like Padlet, quizizz, and QR code. Those activities are expected to provide a flawless learning experience in psycholinguistics class.

Essentials of psycholinguistics cover some areas such as how children learn language; the deaf and language: oral, written, and sign; reading principle and teaching; wild and isolated children and critical age for language learning; animal and language learning; children vs adults in second-language learning; second-language teaching methods; bilingualism, intelligence, transfer and language strategies; relationship between language, thought, and culture; where does language come from? Intelligence, innate language ideas, or behaviors; Natural grammar, mind, speaker performance; biological foundation of language neuroscience (brain specialization); treatment, and stress affect learning, motivation, and rewards.

ESSENTIALS OF PSYCHOLINGUISTICS

Dr. Ramli, S.S., M. Pd.
Dr. Woro Kusmaryani. S.Pd., M.Pd.
Dr. Vivit Rosmayanti, S.Pd.I., M.Pd.

ESSENTIALS OF PSYCHOLINGUISTICS

FOREWORD

Greetings from the fascinating field of psycholinguistics, which lies at the intriguing nexus of linguistics and psychology. In the pages that follow, we'll go on an investigation into the complicated processes that the human mind goes through when it tries to make sense of language. The ultimate sign of human intelligence, language is both a window and a mirror into the inner workings of the mind. We communicate with one another, share our experiences, and express our opinions through language. However, language generation and comprehension involve a wide range of intricate cognitive processes and systems that work with startling speed and accuracy.

We unravel the puzzles of how humans learn and use language in the multidisciplinary discipline of psycholinguistics, from the quick processing of single phonemes to the intricate production of complex sentences. We can better understand the cognitive mechanisms behind language comprehension, production, and acquisition by looking through the prisms of empirical research, theoretical frameworks, and practical applications. However, psycholinguistics is more than just a study topic; it's a scientific expedition with far-reaching consequences for our comprehension of human nature and civilization. We can learn more about the inner workings of the human mind, including its biases, limitations, and limitless potential, by solving the puzzle of language processing. We learn how language affects our behavior, how it forms our views, and how it represents the cultural fabric of all of humanity.

Let's be amazed by the creativity and intricacy of the human mind as we begin this investigation of psycholinguistics. Let's celebrate the various languages and dialects that exist in the world and accept their uniqueness as a means of expressing our individuality and making sense of the experiences we have had. And let us never stop marveling at the power of language, a mental bridge, a window into the psyche, and the foundation of human civilization. This exploration of the fields of psycholinguistics will

pique our interest, kindle a passion, and broaden our perspective on what it is to be human

LIST OF CONTENTS

ESSENTIALS OF PSYCHOLINGUISTICS

Dr. Ramli, S.S., M. Pd.
Dr. Woro Kusmaryani. S.Pd., M.Pd.
Dr. Vivit Rosmayanti, S.Pd.I., M.Pd.

UNIT 1 | HOW CHILDREN LEARN LANGUAGE

Learning Objectives:

1. Understand the stages of speech production, from vocalization to babbling to speech, and the corresponding milestones in infants' language development.
2. Analyze the transition from babbling to speech, including the acquisition order of consonants and vowels and the role of visible articulators in speech production.
3. Examine earlier and later speech stages, including naming, holophrastic functions, telegraphic speech, and morpheme acquisition.
4. Explore speech comprehension development, including prenatal exposure to speech sounds and the sequential relationship between comprehension and production.
5. Investigate the interconnection between speech production, comprehension, and thought processes in language acquisition.

Introduction

We are excited to present this comprehensive learning about "How Children Learn Language." The aim of this chapter is to help you understand how children acquire language skills. Learning language is an amazing achievement, and by studying it from a psycholinguistic perspective, we can uncover the complex ways our minds work. In this chapter, we will explore the different stages of language development in children, look at theories that explain how language learning happens, and examine the many factors

that influence this process. We will dive into the interesting world of how children learn language, from their early communication to using words and sentences.

Understanding how children learn language is valuable not only for parents, teachers, and language specialists but also for anyone who wants to learn more about how our minds and communication abilities develop. By studying the theories and research in psycholinguistics, we can appreciate the remarkable language skills that children possess. Throughout this chapter, we will engage in interactive activities, analyze real-life examples, and discuss relevant case studies. These activities will help you better understand the topic. We will also provide questions and assignments to encourage you to think critically and apply what you've learned. By the end of this chapter, you will have a strong foundation in the theories and processes of children's language acquisition. This will enable you to understand how language develops and its importance in early childhood.

Join us as we embark on this exciting journey to explore "How Children Learn Language"

Can You Unlock the Secrets of Children's Remarkable Language Learning?

Source: https://unsplash.com/photos/JrrWC7Qcmhs

Language acquisition is a remarkable feat achieved during early childhood, as infants transition from having no speech comprehension or production abilities to developing vocabulary and grammatical rules by the age of 4. This proficiency often astounds adult second-language learners. Psycholinguists study the distinct yet interconnected processes of speech production and comprehension to gain a deeper understanding of language acquisition. Explore the fascinating journey of language learning further by delving into the content of this chapter.

Language acquisition is a remarkable feat achieved during early childhood, as infants transition from having no speech comprehension or production abilities to developing vocabulary and grammatical rules by the age of 4. This proficiency often astounds adult second-language learners. Psycholinguists study the distinct yet interconnected processes of speech production and comprehension to gain a deeper understanding of language acquisition. Explore the fascinating journey of language learning further by delving into the content of this chapter.

Before delving deeper into the core content, we would like you to watch a video titled "Language: The First 5 Years of Life of Learning" :

After watching, take some time to reflect and answer the following reflection questions:

EXPLORE AND REFLECT

SCAN HERE

- What are the main stages or milestones in language development during the first five years of life?
- How does language acquisition progress in terms of vocabulary and grammar during this period?
- What role does interaction with caregivers and the environment play in language development?
- Were there any specific examples or anecdotes in the video that resonated with you.

A. Understanding the Progression of Speech Production
1. From Vocalization, to Babbling to Speech

Infants create a range of noises, including crying, cooing, and gurgling, before they make spoken sounds. Even deaf children make the same sounds as other infants (Steinberg & Sciarini, 2006).

Vocalization to Babbling (1-12 months)
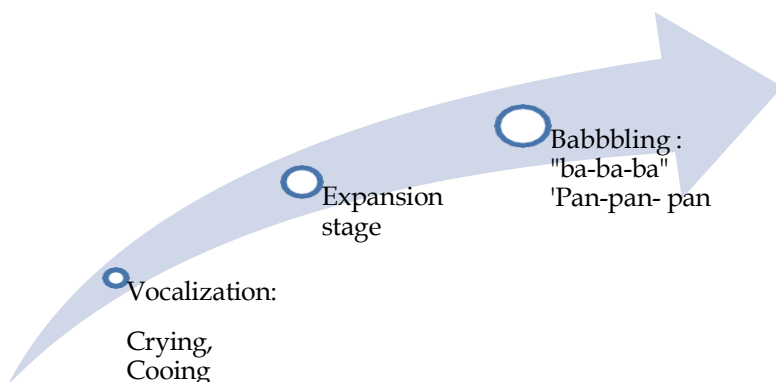
Babbbling :
"ba-ba-ba"
'Pan-pan- pan

Expansion stage

Vocalization:

Crying,
Cooing

Infants create a range of noises, including crying, cooing, and gurgling, before they make spoken sounds. Even deaf children make the same sounds as other infants (Steinberg & Sciarini, 2006).

Infants' speech development from vocalization to babbling can be described in the following stages:

a. Vocalization: During the first two months of life Infants start infants engage in various vocalizations, such as crying, cooing, and gurgling. Around the age of 2-3 months, infants initiate the production of cooing sounds, which are vowel-like sounds generated at the posterior part of the mouth (Ying-Ruo, 2002).

b. Expansion Stage: Between four and six months, infants engage in vocal play, experimenting with a broader range of sounds and variations in pitch and volume. They may imitate the sounds they hear and begin to explore different consonant and vowel combinations accompanied by facial expressions and gestures. This stage occurs around 4-6 months of age (Stark, 1981; Masapollo, Polka, & Minard, 2016).
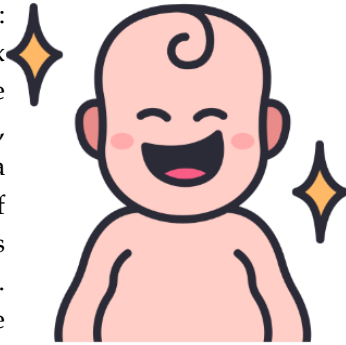
Babbling to Speech (Around 1 year

c. Babbling: Between 6-12 months, infants go through two notable phases during babbling. The first is canonical babbling (6-10 months), where they repeat consonant- vowel combinations like "ba-ba-ba" or "ma-ma-ma." This phase reflects their exploration of speech sounds. The second phase is reduplicated babbling (10-12 months), characterized by repeating the same syllable like "ba-ba- ba" or "da-da-da." (Rvachew & Alhaidary, 2018). Babbling to Speech (Around 1 year)

d. The transition from babbling to speech encompasses several stages. Initially, children move from babbling to producing their first meaningful words, marking an important milestone in their language development (McGillion et al., 2017). However, there is a noticeable

discontinuity between babbling and meaningful speech, indicating a shift in intentionality. Babbling, which starts as unintentional vocalization, becomes more purposeful and less random over time (Steinberg & Sciarini, 2006).

Image Source: Hand-drawn speech therapy scenes collection by Freepik from www.freepik.com https://bit.ly/3wwJRY6

e. During this transition, children also follow a specific acquisition order for consonants and vowels. They learn to observe cues related to pronunciation, gradually developing their ability to produce speech sounds accurately. Vowel acquisition typically occurs in a back-to-front pattern, with sounds like /a/ and /o/ acquired before sounds like /i/ and /u/ (Lust, 2006). Visible articulators, such as the mouth and lips, play a crucial role in aiding children's speech production, allowing for easier and more fluid speech as they progress (Kuhl & Meltzoff, 1988). Throughout this process, a key driving force is the child's motivation for meaningful communication. Their desire to

express themselves and connect with others fuels their speech development.

2. **Earlier speech stages**

Earlier speech stages in children's speech production are outlined by Steinberg and Sciarini (2006). The stages include:

Naming
Children begin using single words (nouns) to express their needs and communicate with others. For example, saying "ball" or "dada" (referring to father)

Holophrastic functions
One-word utterances convey more complex meanings beyond simple naming. Intonation, context, and gestures play crucial roles in conveying intentions and needs.

Telegraphic speech
Children start combining words to form short phrases or sentences. Although some elements may be omitted, these utterances demonstrate their growing ability to convey meaning and construct basic sentences.

Morpheme acquisition
Children gradually learn and incorporate grammatical units (morphemes) into their speech, leading to more complex sentences and precise meanings.

It is important to note that individual variations exist in the progression and timing of these stages, influenced by factors like environment, social interaction, and cognitive abilities.

3. Later speech stages:
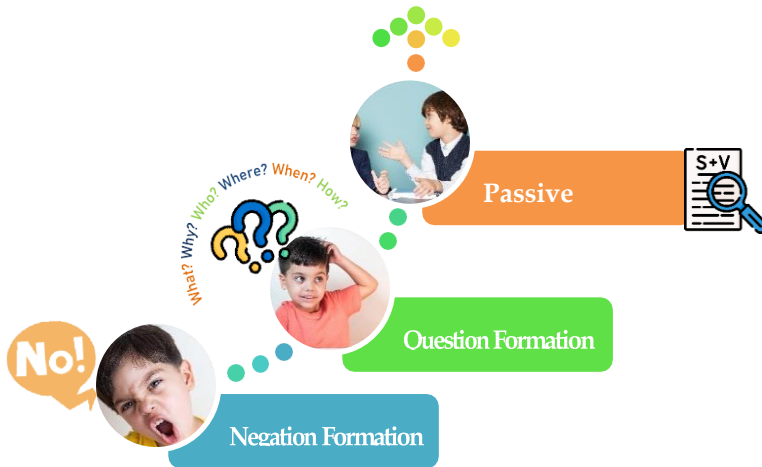
Later speech stages in children's speech production, as outlined by Steinberg and Sciarini (2006), include the following:

a. Negation Formation: Between 18 months and 30 months, children learn to express negation in their speech. They use words like "no" or "not" to deny or refuse something, asserting their preferences and establishing boundaries (Steinberg & Sciarini, 2006).

b. Question Formation: As children progress, they acquire the ability to form questions. Yes-No questions involve inverting the subject and auxiliary verb or using question intonation, while WH questions (who, what, when, where, why, how) seek specific information, expanding their vocabulary and reasoning skills (Steinberg & Sciarini, 2006).

c. Passive Formation: Starting from around 2 years old, children begin using passive sentence structures. This involves rearranging the sentence and using "to be" and the past participle of the main verb. Passive voice emphasizes the receiver of the action and contributes to

their understanding of sentence forms (Steinberg & Sciarini, 2006).

After watching the video, engage in a group or individual discussion based on the following prompts:

a. **Share your observations**: Discuss the language development milestones or behaviors you noticed in the children featured in the video. What stood out to you? Did you **observe** any specific language skills or communication strategies?

b. **Personal experiences:** Share an example of a language milestone or behavior you have observed in a child you know who is between 2 to 3 years old. How does it relate to the language development milestones seen in the video? Discuss any similarities or differences you notice

B. Understanding the Progression of Speech Comprehension

Up until now, our emphasis has been on the child's progress in speech production. However, we will now shift our attention to the child's advancement in speech comprehension. Specifically, we will explore when the ability to comprehend speech emerges and how it correlates with speech production.

FUN INSIGHT

Rie, a mute Japanese girl studied by Steinberg and Chen in 1980, displayed astonishing speech comprehension skills. Despite her inability to speak, she understood complex commands and mastered 100 kanji characters, showcasing the remarkable potential of mute individuals in language comprehension.

1. **Fetuses and Speech Input**

   Recent research has revealed that even before birth, fetuses have the ability to hear and process speech sounds. Studies have shown that the mother's speaking sounds can be heard by the fetus, even amidst the background noise of the womb. This suggests that exposure to speech during the prenatal period may play a role in the early development of speech comprehension (Benzaquen et al., 1990; Lecanuet et al., 1989; DeCasper & Fifer, 1980).

2. **Mute individuals comprehend speech without producing it**

   Individuals who are unable to speak but can hear are capable of understanding spoken language, even though they cannot produce speech themselves (Suter, 1985). Despite this, they can comprehend sentences that reflect the fundamental aspects of language, such as understanding different sentence structures and recognizing synonyms and ambiguity. The reason behind their comprehension abilities lies in the development of mental grammar based on their understanding of speech. This grammar allows them to comprehend the language they are

exposed to. It is similar to the grammar that typically developing children acquire during language development (Steinberg & Sciarini, 2006).
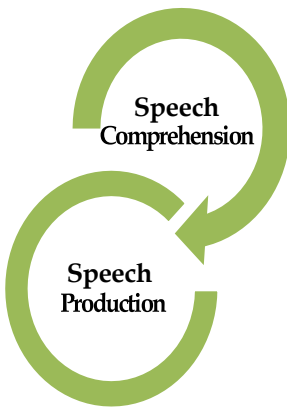
3. **Speech comprehension precedes speech production in normal children**

The development of speech comprehension and speech production in typically developing children is closely interconnected. Children first learn to understand the meaning of words and sentences before they can effectively use them in their own speech. Comprehension abilities emerge before production, and children learn fromobserving and connecting speech to objects, situations, and events. As they acquire comprehension skills, they gradually incorporate them into their own speech. Word recognition abilities can emerge as early as 6 months old, with infants associating language labels with specific objects. The processes of comprehension and production develop in parallel, with production striving to catch up with comprehension throughout language acquisition (Steinberg & Sciarini, 2006).

4. **Speech production lags behind speech comprehension**

Studies indicate a consistent delay between speech comprehension and speech production in language development (Steinberg & Sciarini, 2006; Huttenlocher, 1974; Sachs & Truswell, 1978; Steinberg & Steinberg, 1975). Young children demonstrate higher levels of comprehension compared to their production abilities, understanding and responding appropriately to named objects and commands without using those specific words and structures in their own speech. Children at the one- word stage of production exhibit advanced comprehension of syntactic structures comprising multiple words. They can understand written language before being able to vocalize it. However, research on speech comprehension is limited compared to speech production studies. Recognizing and supporting early comprehension development is crucial in language acquisition research and education.

C. The Interconnection between Speech Production, Speech Comprehension, and Thought
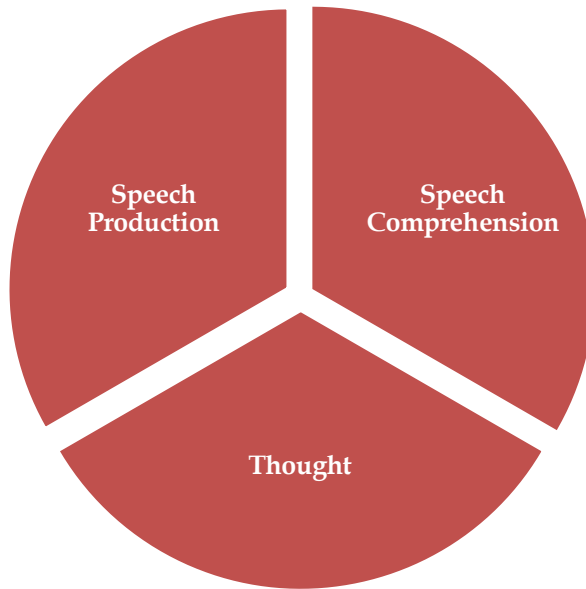
According to Steinberg and Sciarini (2006), speech production precedes speech comprehension in children. Before fully understanding language, children must first develop the ability to produce speech by uttering words and forming sentences. However, the foundation for speech comprehension lies in cognitive abilities and thought processes. These cognitive processes provide the basis for understanding and making sense of linguistic input. Therefore, speech production serves as a prerequisite for speech comprehension, while thought processes form the foundation for comprehending and deriving meaning from speech.

The Impact of Parentese and Baby Tallk on Infant Language Acquisition and Communication Skills

According to Steinberg & Sciarini (2006) Parentese, also known as infant-directed speech or motherese, is a unique way of talking that adults naturally use when communicating with infants or young children. It has specific features that are believed to help infants learn language and engage in meaningful communication. Parentese involves using language that is relevant to the child's immediate surroundings and experiences, using correct grammar and simpler sentence structures to make it easier for infants to understand. The vocabulary used in parentese is simplified and familiar to the child, and adults emphasize important words through intonation and stress. This style of communication is not limited to parents and is also adopted by older siblings and caregivers. Similarly, baby talk involves modifying vocabulary while maintaining standard sentence structure to create a nurturing and engaging language environment for infants Both parentese and baby talk play a role in supporting language acquisition and facilitating effective communication skills in infants.

Source: https://bit.ly/3jxtb5d
https://bit.ly/3p6Moik
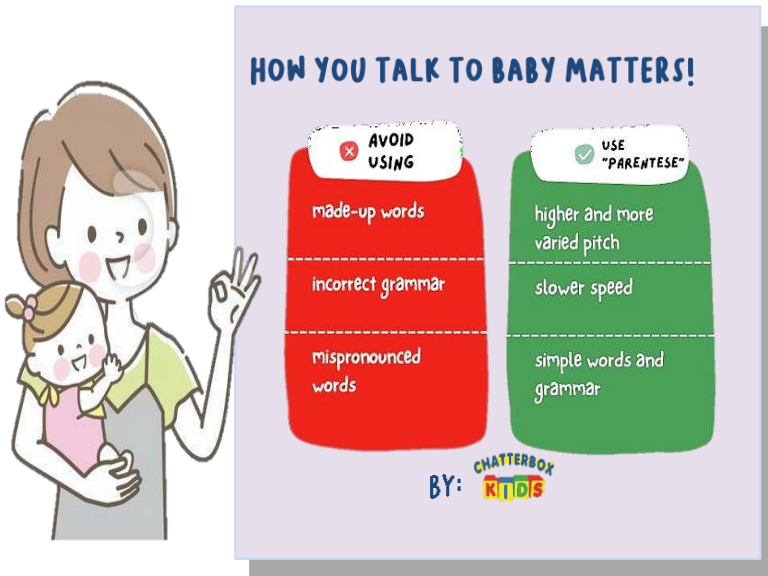
D. Imitation, Language Structures Learning, and Self-Correctionin Language Acquisition

According to Steinberg & Sciarini (2006) Imitation plays a crucial role in language acquisition, allowing children to learn how to pronounce sounds and words by replicating what they hear. However, it primarily focuses on speech production rather than comprehension. Rule learning is another important aspect of language development, as children internalize language rules to create original utterances and express themselves in unique ways. Contrary to popular belief, research suggests that correction does not significantly contribute to grammar learning, as children often self-correct their own errors. Additionally, children learn the meaning of abstract words by initially grasping concrete concepts and gradually expanding their vocabulary through real-life experiences.

E. Learning Processes Involving Memory and Logical Reasoning

According to Steinberg & Sciarini (2006) Memory and Logic in Language Acquisition: Memory plays a vital role in language learning, with associated learning establishing connections between words and their meanings through repeated exposure. Episodic learning preserves words and their context, while inductive and deductive logic aids grammar acquisition and inference-making. Memory and logic synergize to bolster language development.

ACTIVITIES & TASK

TASK 1

Read the descriptions provided by the parents about their children's developmental stages and habits, and then Match each description with the corresponding child.

My baby loves vocal play. When I sing a song, he tries to imitate the melody using his own vocalizations.

VOCALIZATION

LiLY

My baby expresses her needs by crying when she's hungry or uncomfortable. I noticed that she also makes cooing and gurgling sounds when I interact with her

EXPANSION STAGE

HiRO

My son has started using his first meaningful words. When he sees his favorite toy, he excitedly says "ball" to express his desire to play with it.

AiRA

My daughter produces repetitive consonant-vowel combinations like "ba-ba-ba" and "ma-ma-ma. She enjoys imitating the sounds she hears.

ETHAN

16

COLLABORATiVE GAME-BASED TASK

Let's build the snowman game with your friends! Read the instructions below

Snowman Game

flippity.net

HOW TO PLAY?
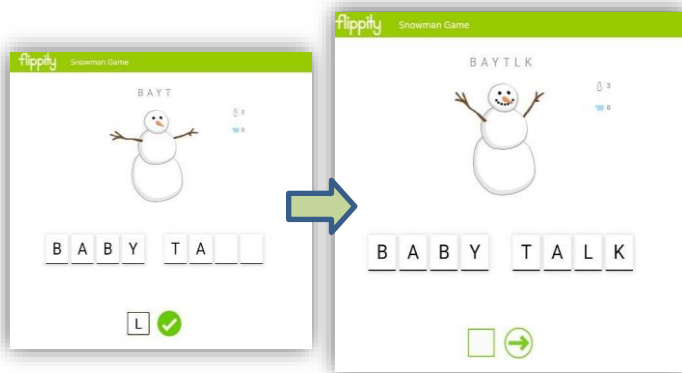
1. Divide yourselves into two balanced teams.
2. Access the game using the provided link or QR code
3. Each team will take turns selecting a representative to guess the word or phrase.

4. The opposing team will provide clues one by one about the chosen word or phrase.
5. The number of clues given by the opposing team will be limited, for example, a maximum of 5 clues.
6. The representative from the guessing team will have a chance to guess the word or phrase after each clue.
7. If the representative successfully guesses the word or phrase correctly, the team will earn points.
8. Once the first team completes their turn, it will be the second team's turn to guess, and soon.
9. The team with the highest score after all the rounds will be the winner.

TASK 3

Watch the video "Let's Talk: 2 to 3 Years" using the provided QR code:

REFLECTION TASK

- **Share your observations**: Discuss the language development milestones or behaviors you noticed in the children featured in the video. What stood out to you? Did you observe any specific language skills or communication strategies?

- **Personal experiences:** Share an example of a language milestone or behavior you have observed in a child you know who is between 2 to 3 years old. How does it relate to the language development milestones seen in the video? Discuss any similarities or differences you notice

POST YOUR ANSWER ON THIS PADLET

SUMMATIVE TEST

This part will test your knowledge and comprehension of "How Children Learn Language?" Get ready to challenge yourself

1. Which of the following is NOT a stage of infants' speech development from vocalization to babbling?
   a. Vocalization
   b. Expansion Stage
   c. Babbling
   d. Naming
2. The transition from babbling to speech encompasses several stages. Which stage marks the production of infants' first meaningful words?
   a. Vocalization
   b. Babbling
   c. Naming
   d. Telegraphic speech
3. What role do visible articulators, such as the mouth and lips, play in aiding children's speech production?
   a. They help with vowel acquisition
   b. They facilitate passive formation
   c. They enable telegraphic speech
   d. They allow for easier and more fluid speech
4. Between 18 months and 30 months, children learn to express negation in their speech. This stage is known as:
   a. Naming
   b. Holophrastic functions
   c. Negation formation
   d. Passive formation
5. What milestone in language development indicates that speech comprehension precedes speech production in normal children?
   a. Word recognition abilities
   b. Babbling

    c. Naming objects

    d. Telegraphic speech

6. Studies indicate a delay between speech comprehension and speech production in language development. Which stage demonstrates higher levels of comprehension compared to production abilities?

    a. Babbling

    b. Holophrastic functions

    c. Negation formation

    d. Passive formation

7. The development of speech comprehension and speech production is interconnected with which cognitive processes?

    a. Memory and logical reasoning

    b. Imitation and self-correction

    c. Thought processes and memory

    d. Logical reasoning and self-correction

8. Which style of communication involves using language that is relevant to the child's immediate surroundings and experiences to facilitate language acquisition?

    a. Parentese

    b. Imitation

    c. Baby talk

    d. Logical reasoning

9. What contributes to children's overall linguistic competence in language acquisition?

    a. Imitation and self-correction

    b. Logical reasoning and memory

    c. Naming objects and passive formation

    d. Episodic learning and deductive
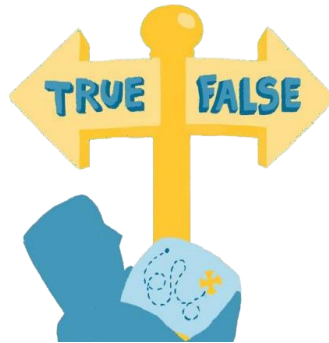
This Photo by Unknown Author is licensed under CC BY-

Answer the following "True or False" questions based on the provided material. Write either "T" for True or "F" for False for each question.

1. _____ Infants start their speech development by producing consonant-vowel combinations during the vocalization stage.

2. _____ Babbling is characterized by repeating the same syllable like "ba-ba-ba" or "da-da-da."

3. _____ The transition from babbling to speech in infants occurs around 1 year of age.

4. _____ Speech comprehension precedes speech production in typically developing children.

5. _____ Mute individuals who cannot produce speech are unable to comprehend spoken language.

6. _____ Speech production lags behind speech comprehension in language development.

7. _____ The foundation for speech comprehension lies in cognitive abilities and thought processes.

8. _____ Parentese and baby talk are believed to facilitate language acquisition and communication skills in infants.

9. _____ Correction significantly contributes to grammar learning in children.

10. _____ Memory and logic play important roles in language acquisition and overall linguistic competence.

Select one of the three critical thinking questions mentioned below:

o   Based on recent research, does exposure to speech during the prenatal period have an impact on the development of speech comprehension?

o   What is the relationship between speech comprehension and speech production in typically developing children?

o   How does the use of Parentese and Baby Talk affect infant communication skills and language acquisition?

Write a short essay and use credible sources to gather additional information and evidence related to your chosen question.

YOUR ESSAY HERE

F. Conclusion

In this chapter, we explored the fascinating journey of child language development, emphasizing the significance of early experiences, social interactions, and environmental factors. By analyzing the language development of an observed child, we witnessed their progress and gained valuable insights. Every child's language development is unique, and recognizing their strengths and areas for improvement allows us to provide appropriate support.

The journey of language development continues beyond this chapter. As caretakers and educators, it is crucial to continue observing, engaging, and providing enriching language experiences for children. Completing this chapter deepened our understanding of child language development, equipping us to positively contribute to children's linguistic growth. Congratulations on completing this valuable learning experience. Best wishes in your future endeavors to support and foster language development in children.

REFERENCES

Applied Linguistics, 2(2), 117–131.

Bialystok, E. (2017). Types of bilingualism and their influence on language processing. Applied Linguistics, 38(3), 319-324.

Bostwick, M. (1999) A Study of an Elementary English Language Immersion School in Japan. Unpublished doctoral dissertation, Temple University, Philadelphia.

Bruck, M., Lambert, W., & Tucker, G. (1976). Cognitive and attitudinal consequences of bilingual schooling: The St Lambert project through grade six. International Journal of Psycholinguistics, 6, 13–33.

Cummins, J. (1979). Subtractive bilingualism: Linguistic disadvantages and consequences. Canadian Journal of Education, 4(3), 373-383.

Faerch, C., & Kasper, G. (1983). Strategies in Interlanguage Communication. London: Longman.

Grundy, J. (2020). The effects of bilingualism on executive functions: An updated quantitative analysis. Journal of Cultural Cognitive Science, 4(2), 177–199. https://doi.org/10.1007/s41809-020-00062-5

Huttenlocher, J. (1974). The origins of language comprehension. In R. A. Friedman & L. B. Kravitz (Eds.), Developmental Psycholinguistics and Communication Disorders (pp. 95–124). New York: Academic Press.

Journal of Education, Humanities and Social Sciences, 8, 1854–1859. https://doi.org/10.54097/ehss.v8i.4596

Kasper, G., & Kellerman, E. (1997). Communication Strategies. London: Longman.

Kużelewska, E. (2016). Language Policy in Switzerland. Studies in Logic, Grammar and Rhetoric, 45(1), 125–140. https://doi.org/10.1515/slgr-2016-0020

O'Malley, J. M., & Chamot, A. U. (1990). Learning Strategies in Second Language Acquisition. Cambridge Applied Linguistics. Cambridge University Press.

Oxford, R. (1990). Language Learning Strategies: What Every Teacher Should Know. New York: Newbury House.

Oxford, R. (1996). Language Learning Strategies Around the World: Cross-Cultural Perspectives (Technical Report No. 13). Honolulu: Second Language Teaching and Curriculum Center, University of Hawaii at Manoa.

Pan, C. (2023). The Effect of Learning a Second Language at an Early Stage.

Peal, E., & Lambert, W. (1962). The relationship of bilingualism to intelligence.

Peal, E., & Lambert, W. E. (1962). Additive bilingualism: The positive effects on language and cognitive development. In W. F. Mackey (Ed.), Language diversity and cognitive representations (pp. 123-140). Cambridge University Press.

Psychological Monographs, 76(27), 1–23.

Rubin, J. (1981). The study of cognitive processes in second language learning.

Sachs, J., & Truswell, A. S. (1978). Projections in syntactic theory: A case study of the modern English passive. In P. Culicover, T. Wasow, & A. Akmaj

Steinberg, D. D., & Sciarini, N. V. (2006). Introduction to Psycholinguistics (2nd ed.). Pearson Longman.

UNIT 2

THE DEAF AND LANGUAGE: ORAL, WRITTEN, AND SIGN

Introduction

Have you ever considered how crucial learning sign language is? The deaf community uses sign language, commonly referred to as deaf language, as their primary means of communication. Participants will get experience with spoken language, sign language, and written language when engaging with deaf persons. We will use videos and other sources of information to enhance learning as part of our interactive learning strategy.

The Sign language is a visual language used by the people with the speech and hearing disabilities for communication in their daily conversation activities. It is completely an optical communication language through its native grammar. The sign language (SL) is made by specifications of hand and facial idioms to express their views and thoughts of speech and hearing disabled persons with the normal (speech and hearing) people. Most of the normal persons may not clearly understand the sign language. Therefore, there is a massive communication gap between the deaf communities with the general public. There is an inevitability of technology support for speech impairment people as human translators are highly impossible to patronage speech impaired persons in their daily activities in all the time.

ASL is most widely used SL in the world and fourth most usable linguistic in North America. Not only in United States, ASL is also used in Canada, Mexico, West Africa, and Asia. More than 20 other nations including Jamaica, Panama, Thai, Malaysia in which

English is the major communication language uses ASL for their hearing impaired community communication. As ASL is seen as precise and genuine language, it has plentiful variations, like other languages do, such as French and Spanish. ASL is an outstanding form of interaction and favorable to an enormous portion of the speech impairment population. Its foundation, existing conditions, prospect hopes, and global impact are quite amazing and eye-opening.

The Deaf Language

Purpose:

This material is designed to introduce learners to learn sign language. It aims to equip the learners with basic knowledge in sign language.

AIMS:
1. Recognize the differences between written, spoken, and sign language.
2. Recognize the deaf community's usage of a variety of languages and modes of communication.

3. Utilizing the material of spoken, signed, and written language while interacting with deaf people.

CHAPTER:
UNIT 1: SIGN LANGUAGE
UNIT 2: TYPES OF SIGN LANGUAGE
UNIT 3: DEVELOPMENT OF SIGN LANGUAGE

A. Sign Language
   1. What is a sign language?

Deaf and hard-of-hearing people use sign language, to communicate. It is a fully formed language with its own syntax, vocabulary, and grammar. According to (Polinema et al., n.d.) Sign languages use a combination of handshapes, facial expressions, body motions, and other gestures in place of spoken words to convey meaning.

Scan the QR Code below to learn more about the material

Sign languages are not universal and differ across countries and regions. Just as spoken languages have different dialects, sign languages also have variations. Some well-known sign languages include American Sign Language (ASL), British Sign Language (BSL), Auslan (Australian Sign Language), and Japanese Sign Language (JSL), among many others.

In Indonesia Deaf and hard-of-hearing people also use sign language namely SIBI and BISINDO (Bahasa Isyarat Indonesia). If you want to learn more about the language, you can download Hear Me App on your mobile phone. It has many features that can provide your understanding about Indonesia Sign Language.

2. **American Sign Language VS British Sign Language**

        Deaf people in the United States and England utilize the sign languages ASL (American Sign Language) and BSL (British Sign Language). Despite the fact that they are both sign languages, they differ in terms of grammar, vocabulary, and hand gestures.

    Scan the QR Code below to learn more about the material

3. **Finger Spelling**

Words can be spelled using hand motions called "fingerspelling."

While some sign languages, including American Sign Language (ASL), use a one-handed alphabet, British Sign Language (BSL) employs a two-handed alphabet.
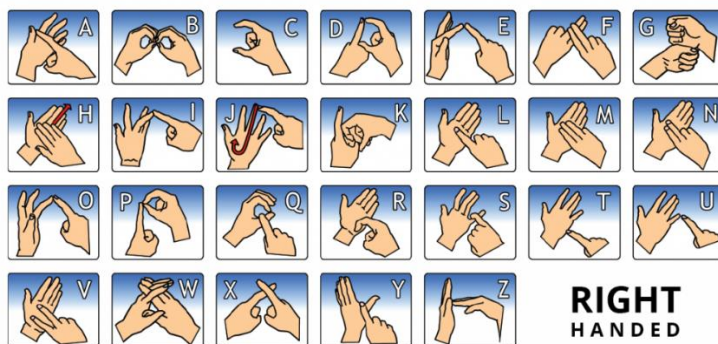
British Sign Language Alphabet

Task 1

Hello, learners! The assignment for today is to produce a TikTok video featuring the American or British Sign Language alphabet from A to Z. Please adhere to the following steps:

a. First, learn the alphabet from A to Z in American Sign Language or British Sign Language. You can refer to the material above or search on the internet or use other resources.

b. Once you have mastered the alphabet, prepare your phone or camera for recording the video.

c. Choose a comfortable and well-lit place to record the video. Ensure sufficient lighting so that your hands are clearly visible.

d. Use the background sound of a children's ABC song that you like.

e. Now, start recording the video. Show your hands forming the letter "A" in American Sign Language or British Sign Language. Hold the position for a few seconds for better understanding.

f. Repeat the same steps for each letter of the alphabet, from A to Z. Ensure that your hand movements are clear and visible.

g. Open the TikTok app and log in to your account. Select the "Upload" option and choose the video you want to share.

h. Write an interesting description for your video, such as "A to Z in American Sign Language" or "Learning the alphabet in British Sign Language." Don't forget to add the hashtag #SignLanguageAlphabet.

i. Finally, click the "Upload" button and wait for your video to be uploaded to TikTok.

j. Share your video with friends and family. You can also invite them to learn the alphabet in sign language.

4. **ASL and BSL Vocabulary**

Scan the QR Code below to learn more about the material

American Sign Language   **British Sign Language**

Let's Practice!
Please Read the instructions carefully!

a. Read and understand the vocabulary and hand gestures used in sign language for introductions. You can use American Sign Language (ASL) or British Sign Language (BSL).

b. Watch examples of hand gestures and the correct pronunciation of words in sign language.

c. Practice each hand gesture and vocabulary listed above carefully.

d. When you feel ready, please come forward in front of the class to take turns practicing self-introductions.

B. Types Of Sign Language

1. **Independent Sign Languages (ISLs) such as American Sign Language (ASL)**

Each signed language has a full set of linguistic features, making them complex systems of communication. Handshapes are the primary "parameter" of signed communication, along with four other "parameters," on the surface. A sign's meaning might completely alter depending on whether the hand is open or closed while making the same action. Similar to how individual signs are defined by palm orientation, motion or contact, position, and non-manual markers (usually mouth motions and facial expressions). A signer is capable of producing complicated statements because to a variety of grammatical structures, some of which lack an equivalent in spoken languages.
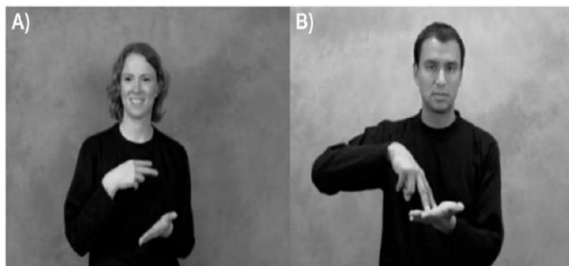
Figure 1. 1. Examples of ASL signs A) and B)
https://images.app.goo.gl/jXeL8qtU65p9pf9b7

a. Some characteristics of ISLs

The signs of an Independent Sign Language (ISL) can be analyzed into three basic components:

1) Hand configuration: the shape that the hand forms;

2) Place of articulation: where in space the hand is formed; and
3) Movement: how the hand moves.

b. American Sign Language (ASL)

American Sign Language (ASL) is a fully grammaticized language, not a pantomimic communication system, and it displays the various grammatical characteristics typically found in spoken languages of the world, despite the apparent potential for a different type of organization offered by the visual-gestural modalities. Unlike English, ASL is a morphologically complex language, perhaps most comparable to polysynthetic spoken languages. The study of ASL acquisition may shed unique light on language acquisition processes more generally: comparisons of the acquisition of American Sign Language with the acquisition of spoken languages may help to delineate those aspects of acquisition which are universal over languages of varying types, and those aspects of acquisition which are specific to certain linguistic and modality-related typologies. Before reviewing the literature on the acquisition of ASL, this chapter describes the structure of the language.

American Sign Language (ASL) is a complete, natural language that has the same linguistic properties as spoken languages, with grammar that differs from English. ASL is expressed by movements of the hands and face. It is the primary language of many North Americans who are deaf and hard of hearing and is used by some hearing people as well.

ASL has rules that govern the relationship between individual signs in a sentence. While the words and morphemes of sentences in languages such as Signing Exact English are signed in the air on a sort of imaginary two-dimensional blackboard and in a word-by-word linear sequence, ASL sentences are radically different.

They are not linear sequences but three-dimensional creations

ASL is a language completely separate and distinct from English. It contains all the fundamental features of language, with its own rules for pronunciation, word formation, and word order. While every language has ways of signaling different functions, such as asking a question rather than making a statement, languages differ in how this is done. For example, English speakers may ask a question by raising the pitch of their voices and by adjusting word order; ASL users ask a question by raising their eyebrows, widening their eyes, and tilting their bodies forward.

Figure 1. 2. Making sentences in American Sign Language
https://images.app.goo.gl/YWc4qFMV1dj1Nzy7A

c. Activity

Scan the QR Code below and watch the video about Family signs in ASL. Then make a video on "introducing family members".

2. The Oral Approach and Total Communication

a. The Oral Approach

The oral approach was a direct reaction to the Direct Method. In contrast to the Direct Method, Oral Approach was based on scientific research. One of the primary desires of the developers of this approach was to have a systematic way of teaching English.

Figure 1. 3. The Oral Approach
https://images.app.goo.gl/rRQJW66uRiNxaUtm7

In this method, vocabulary is considered as a way to improve reading abilities. The 2000 words included in The Oral Approach are crucial for reading comprehension.

Grammar-Speaking, it differs from the grammar-translation method, which emphasizes a universal grammar. Instead, in the Oral Approach, language patterns like Subject-Verb-Object are important. In order to utilize and comprehend the language, students must grasp the language's structures.

The Oral Approach provides a structural perspective on language development. with a focus on moral principles. Students gained knowledge by practicing. Inductive teaching is used. The Oral Approach uses real-world context to teach language. In order to teach, situations like images, objects, or real-world

examples are used. It is expected of the students to listen and repeat what the teacher says. This demonstrates how little content control kids have.

The main features of this approach are:

1) Language teaching begins with the spoken language. The material is taught orally before it is presented in its written form.
2) The target language is the language of the classroom.
3) The new language points are introduced through practical situations.
4) The selection procedure of the vocabulary is monitored to ensure that the general vocabulary essential is covered.
5) The items of grammar are classified according to the principle that the simplest forms must be taught before more complex ones.
6) Reading and writing will be introduced only when the basics of grammar and vocabulary will be established.

b. What is Total Communication

Total communication is using any means of communication — sign language, voice, lipreading, fingerspelling, amplification, writing, gesture, visual imagery (pictures). The sign language used in total communication is more closely related to English. The philosophy of total communication is that the method should be fitted to the child, instead of the other way around. Total communication acknowledges that the means of communication may need to be adjusted based on the situation. Sometimes signing is the right method to use, while at other times, it may be speech. In other situations, writing may be the best method to use.

Although some schools/programs for the deaf use ASL and English, the majority of education programs for the deaf use total communication. (The program my own children attended uses total communication.) The idea is

that using total communication will create the "least restrictive" learning environment for the deaf child, who is free to develop communication preferences (although the child will be encouraged to use both speech and sign language).

c. Activity

Scan the QR Code below and watch the video then write down your understanding of the Total Communication approach.

3. The sign language vs. Oral Approach controversy

Each child is different and what works for one will not work for all. Children born into families with deaf parents who are fluent signers are in a different situation than children born to families with normal hearing parents who do not know sign language at the time of diagnosis. While families who are fluent signers will be able to provide their children with good language, families who don't sign will not. Think about how it is to learn a new language

Most parents of children with hearing loss do not know sign language and the process of learning sign language, just like learning any other language, is long and arduous process meaning that they will not be exposing their children to good language models during the early years. The children who are listening exclusively to spoken language have the opportunity to hear good spoken language models and incorporate this into their speech recognition and spoken language. Children with poor reading skills have limited employment opportunities. Very significantly, the reading

results alone make a case for using spoken language exclusively by parents.

C. Development of Sign Language
1. Public Recognition of ASL and Growth of Deaf Pride

The American Deaf community values American Sign Language as the core of a culturally Deaf identity. Through ASL, members are given a unique medium for personal expression, a spatial and visual language that does not require the use of sound and emphasizes hands, faces, bodies and eyes. Members of this community share a common history, values, morals and experiences. Deaf individuals come from diverse backgrounds and influences, and as a result that variation is reflected in the community. Different types of sign systems are used to varying degrees, and the Deaf community welcomes this variety.

Deaf culture focuses on the stimulation of the eyes and the enhanced visual perceptiveness of Deaf individuals. This has resulted in a great history of rich ASL literature and storytelling. The oral tradition of storytelling has allowed members of the Deaf community to pass down the histories of great Deaf men and women, providing for Deaf children access to role models that enable them to feel rooted in history, while also giving them mentors with common experiences.

The American Deaf community is different from many thriving cultural groups around the world because it is not commonly recognized as distinct and discrete. Most people are born within an existing cultural group gaining direct access to their family and community cultural traditions, norms and values that are passed down from parent to child. Most deaf children, on the other hand, are born to hearing parents. For most Deaf children transmission of the culture of the family or that of the deaf community does not automatically occur. Deaf children typically gain access to the Deaf community through education in Deaf programs with

other deaf children and adults. It is in these visual-spatial environments that a Deaf child becomes "acculturated" through language immersion as well as social interactions with others who share the same language and a similar world view that is experienced primarily through visual rather than auditory experiences. In programs designed with deaf children in mind, Deaf children are not only surrounded by a sizable number of Deaf students, which provides them with a socially accessible environment, but are also exposed to educational programming through which the student gains access to the Deaf community, the history and the values of Deaf culture.

https://images.app.goo.gl/1JSVqGvRVH7UeZ4Y9

Deaf Pride

With the acceptance of ASL, the deaf community became more and more established. The deaf community, with its own language, theatre, and other activities, became a source of pride. Pride grew to an extent that a steadily increasing number of deaf people have said that they would choose not to be hearing. They even deny that deafness is an impairment. To them, the word 'cure' – indeed, the whole notion of deafness as an impairment – is anathema. However, if deafness is not an impairment, then government is under no obligation to help people who have this condition. This would be a significant financial loss. Most members of the

deaf community are probably not in agreement with the non-impairment view.

Deaf Identity Development

Because most deaf people are born to hearing parents, who communicate and educate their children in speaking language all the time. There are too much negation about the deaf, the sign language and the style of deaf in the individual's growth environment. Then the deaf person will conform to the around environment, and identify the hearing culture. But with improving the self-awareness of deaf person, especially after the individual meet the other deaf person, they will feel that they can't enter both hearing social and deaf communicate and their identity will be dissonant. With the more contact with the deaf crowd, the more affirmative themselves; they immerse themselves in deaf culture. The deaf will introspect themselves after change the identity, and then they will understand and aware of the difference between deaf culture and the hearing culture. That means, a majority of deaf people identify themselves in the stage of the hearing identity, the negative identity, the deaf identity and the bicultural identity.

Several influential factors of deaf identity development:
a. The environment of family

Family is the most important living environment, however, Hamers (1996) summarized the literature somewhat differently, stating that "92-97% of deaf children are born into normally hearing families", these hearing parents never thought much about deafness, and even never thought they will have a deaf child. In such family environment, the attitude of hearing parents towards their deaf child, and the language which they used in the family etc. influence the development of their deaf child. deaf children are affected strongly by the environment of their families to identify themselves.

Because a lot of hearing parents' initial views of deafness as a disability and even much deaf parents may adhere to this view, if they persist in their views, they will construct a family's atmosphere of deafness as a disability, then sign language is forbidden in the family, the view of these parents is transmitted to their deaf children. These deaf children will farther away from deaf culture. In contrast, deaf children whose parents or siblings are members of the deaf community are more likely to be exposed to the cultural model of deafness through interaction with family and the deaf community.

b. Educational experience

Another crucial factor in the development of deaf identity is educational experience. In general, deaf persons place in different educational environments that can affect the formation and development of their identities. The basic reason is that they can gain the different view of deafness in different schools. On one hand, deaf children who study in deaf schools or special schools, they are easy to own the view that the deafness is an ethnic culture because of the influences of schoolmates and the mode of communication, for example, even in schools that used oral communication in the classroom, sign language was used outside of classes with peers and sometimes with school personnel (Janesick & Moores, 1992). That means they have more opportunity to contact with other deaf persons, to obtain the more positive view of deafness, and then enter successfully the deaf community upon graduation. But on the other hand, to those deaf children who study in normal schools, namely hearing schools, they are easy to hold the view that the deafness is a disability because of the same reasons. Such different view of deafness will affect the development of deaf children's identities.

c. The mode of communication

To every deaf person, the mode of communication mainly includes sign language and oral language, so the use of the language, the attitude of deaf person to the different language will impact them to construct their identities.

Firstly, the majority of deaf children are born to hearing parent and therefore do not have the opportunity to familiarize themselves with sign language and deaf culture within their family, unless they attend a school for the deaf, or participate the deaf community, where they learn sign language as well as the norms of the deaf culture by interacting with their deaf peers. Sign language, just like a bridge, brings deaf persons enter deaf culture. Secondly, many deaf people identify themselves as people who see the world visually and use sign language. Deafness is not a loss but a social, cultural, and linguistic identity. Thus, we can say that there is great potential not only within the mode of communication and the development of deaf identity but also within the means of communication and cultural heritage

d. The status of hearing loss

At last, the status of hearing loss is also an important influential factor of deaf. The status of hearing loss is the only physical one in all influential factors that were summarized in present article, both the onset of hearing loss and the degree of hearing loss emphasis the physical status rather than the social or cultural environment. Although certain deaf person loses his/her hearing might be related with social or cultural surrounding, for example, certain deaf people lose hearing because of war or earthquake, in general, such influential factor more emphasis the physical or medical reason. Compared with the other three influential factors, namely the environment of family, the educational experience and the mode of communication, this factor more emphasize

that the influence or damnification of hearing loss to the behaviour or psychology of deaf people.

https://images.app.goo.gl/Xwszz5SmjBUbWFfY8

Activity

Scan the QR Code below and watch the video about A deaf son. then make a group and discuss what you think as a society towards deaf people.

2. **How the Deaf Can Communicate with the Hearing and Succeed in the Workplace**

People who are deaf or hard of hearing can face a number of challenges at work, because their ability to communicate in a typical business environment may be limited.

For example, they might experience difficulty in an office with lots of background noise, poor acoustics or echoes. They may also have trouble understanding speakers or presenters who talk quickly or quietly, or who interrupt one

another, particularly if they are not within line of sight or if they don't lipread.

Certain standard office equipment may not be suitable for people with hearing loss. For example, they may not be able to participate in conference calls or virtual meetings without special hardware or software, and they might miss audible cues from their computers or other devices.

People with hearing loss may feel like they miss out on important business conversations, or other information that they need to do their job. And, if colleagues don't include them in social events or even water-cooler discussions, they can feel like outsiders.

These limitations can be stressful, and might also reduce their productivity and harm their job performance. As a result, they could become disengaged at work.

The Need for Literacy

Once the problem of how deaf persons are to communicate with one another has been dealt with satisfactorily (through an Independent Sign Language), the problem that remains is how deaf people are to communicate with members of the dominant hearing community.

Low Level of Literacy Leads to Low-Level Jobs

Although Total Communication has improved the lot of the deaf in a significant way by providing sign language, in addition to speech training, one great educational problem still remains, that of literacy

Written Communication by Notes

With deaf persons largely unable to have their speech understood, they can use written notes for personal communication. A note written by a deaf person will receive more attention and respect than if that person used mumbled speech.

https://images.app.goo.gl/u4RzLkpsPc1GUyw39

Activity

Scan the QR Code below and watch the video about navigating deafness in a hearing world. then make a group and discuss what difficulties deaf people face in the world of work and how they can succeed.

3. **Programme for Teaching Written Languages**

For the learning and teaching of written language, two basic theoretical principles may serve as guides: (1) words are best acquired as conceptual wholes in a relevant context, and (2) phrases and sentences are best acquired in a relevant context through induction, just as hearing children learn their first language.

To the extent that hearing-impaired children experience the same environment as hearing children, the hearing-impaired can acquire the same concepts relating to that environment. Their experiences of people, pets, toys, foods, etc. can then be associated with written forms that are provided by the parent or teacher (hereafter, the 'instructor' for whoever does the teaching). Thus, for example, written

words like 'Mommy', 'Daddy', 'dog', 'car', 'banana', 'orange', 'table', and 'chair' could be written on cards and attached to the relevant objects. In time such written forms acquire a symbolic value, that is, a meaning.

as far as the hearing-impaired child who is learning written language is concerned, a similar primacy of comprehension over production obtains. In this case, however, comprehension consists of the interpretation of written forms, and production consists of the writing of such forms. However, an even greater lag in writing production may be expected compared with the lag that occurs in speech production.

https://images.app.goo.gl/57Tq7e3hRqLznP6c6

Activity

Scan the QR Code below and watch the video about The Montessori Language Program and write down your understanding of how the teaching program can train children in their language skills.

REFERENCES

Berke, J. (2020). Using Sign Language and Voice for Total Communication .

Chen, G. (2014). Influential Factors of Deaf Identity Development. *Electronic Journal for Inclusive Education, Vol.3 (2)*, 5.

Chiaragigantessm. (2014). The Oral approach.

James, T. G., Coady, K. A., Stacciarini, J. R., McKee, M. M., Phillips, D. G., Maruca, D., et al. (2022). "They're not willing to accomodate Deaf patients": Communication Experinces of Deaf American Sign Language Users in the Emergency Department. *Qualitative Health Research, Vol.32 (1)*, 48-63.

Newport, E. L., & Meier, R. P. (2017). Akusisi Bahasa Isyarat Amerika . *Pers Psikologi: The Crosslinguistic Study of Language Acquisition*, 881-938.

Shivashankara, S., & Srinath, S. (2018). American Sign Language Recognation System: An Optimal Approach. *International Journal of Image, Graphics, and Signal Processing, Vol.11 (8)*, 18.

Steinberg, D. D., Hiroshi, N., & Aline, D. P. (2013). *Psycholinguistics Language, Mind, and World.* New York: Routledge.

Thomas, J. J., & Fujimura, C. K. (2022). *Developing Cross-Cultural Competence for Leaders: A Guide.* New York: Routledge.

UNIT 3

READING PRINCIPLE AND TEACHING

A. Writing Systems and Speech

The two primary ideas of sound-based and meaning-based writing systems can be used to categorize the writing systems used throughout the world to represent the spoken words of a language. (Donald & Carol , 2019) Symbols are used to represent speech sounds in systems that use sound, such as phonemes or syllables. Devanagari in India, Arabic in Egypt, the Hangul syllabary in South Korea, the Kana syllabaries in Japan, the Cyrillic alphabet in Russia and Bulgaria, and the Roman alphabet in English-speaking nations and Western Europe are some examples of sound-based writing scripts. (Peter, 2021)

There is a great degree of connection between the written symbols and spoken forms in several languages with sound-based orthographies, such as Finnish and Spanish. (Linda , Anas, & Dyah Aminatun, 2021) The phonemes of the spoken languages of Finland and Spain are represented by the Roman alphabet. In contrast, the syllables of the spoken languages of Korea and Japan are represented by their respective national scripts, Hangul and Kana. (Charles, Script Effects as the Hidden Drive of the Mind Cognition, and Culture, 2020) The Japanese writing system is more difficult since it also uses Chinese-inspired characters (kanji). English has a more erratic sound-based spelling than these other languages, which makes it more challenging to read.

English spelling has received much criticism for being inconsistent, which causes problems for students. (Amanda, Kausalai, & R., 2022) The satirical poem "Why Wonders Lead to Blunders" highlights the peculiarities and difficulties of English spelling. The purpose of English orthography is to use the Roman alphabet to represent each particular phoneme in the language. English spelling, however, does not always faithfully reflect its phonemes due to historical modifications and changes in spoken language. (Anita, Denis, Camille, & Tino, 2019)

Why Wonders Lead to Blunders

I take it you already know
of tough and bough and cough and dough.
Others may stumble but not you
on hiccough, thorough, laugh, and through.
Well done. That sure was fun.
But, my friend, it's not the end.
Beware of heard, a dreadful word
that looks like beard and sounds like bird,
And dead: it's said like bed, not bead
For goodness' sake, don't call it 'deed'!
Watch out for meat and great and threat
which rhyme with suite and straight and debt.
A moth is not the moth in mother
nor is broth the broth in brother
And here is not a match for there
nor dear and fear for bear and pear
And then there's dose and rose and lose
Just look them up – and goose and choose
and cork and work and card and ward
and font and front and word and sword
and do and go and wart and cart
Yet, I've hardly touched the heart!
What kind of a spelling system is that, ask you?
Well, like me, you can master it by eighty-two!
        T.S.W. (Only initials of author are known; modifications by D.D.S.)

English letters, particularly vowels, frequently represent several sounds, and combinations of letters are employed to represent certain English sounds. For instance, the letter "a" stands for the phonemes "want" (/a/) and "cat" (/ae/). (Abhishek, Carlos, & Charles, 2020) Other English sounds are

represented by combinations like "th" and "a + C + e" (/ei/ as in 'ate'). The phonemes of the English language are primarily represented by letters in the writing system, but certain words additionally employ morpheme symbols. (Xingshan, Linjieqiong, Panpan, & Jukka, 2022)

English spelling has evolved considerably less throughout the ages than spoken language has, which is one explanation for the differences between English spelling and pronunciation. (Anna & Julie, 2020) Old English, which was influenced by Germanic and French languages, contained some sounds that have since vanished or changed in contemporary English. Because of historical factors, there is a complicated and indirect relationship between English pronunciation and spelling. (Jodie, Julia, M. Luisa, & Helen, 2019)

The Semitic peoples of the Middle East invented the Roman alphabet, which is the basis for English letters. (Philip & Philippa, 2020) The alphabet was first modified by the Phoenicians, then it was handed down to the Greeks and subsequently the Romans, who further modified it to fit their respective languages. (Mark, J.C, & McDougall, 2022) The Roman writing system extended throughout Europe as a result of the Roman Empire's growth and the influence of the Roman Catholic Church. The Romanized writing system was also spread by European colonialism, where it underwent additional adaptations to fit regional languages.

Some writing systems, like Chinese, are meaning-based rather than sound-based. Chinese symbols represent both syllables and morphemes, which are meaningful linguistic building blocks. One or more morphemes may be represented by each character. For instance, the Chinese word "kowtow" is made up of two morphemes: "kow" for "knock" and "tow" for "head." (Charles, 2020) Chinese characters have their roots in images, although the majority of those still in use today lack clear visual cues. Instead of being graphic, the relationship between the symbols and morphemes is customary.

Japanese uses syllabaries, which it acquired from China centuries ago, as well as a meaning-based system. (Charles , 2020) Chinese and Japanese writing systems differ from sound-based systems like the Roman alphabet in that they both use characters that convey meaning.

B. The Whole-word Approach

The Whole-word strategy relies on what are referred to as "sight words". This approach essentially consists of getting young children to memorize lists of words and teaching them a number of strategies of figuring out the textual content from a collection of clues. Using the complete word approach, English is being taught as an ideographic language, such as Japanese or Chinese. In the easiest terms, "whole language" is a method of educating youth to study by using recognizing words as complete portions of the language. They believe that the language should be taught as a whole and not taught separately (Fauzi & basikin, 2020). Proponents of the total language philosophy agree that language ought to no longer be broken down into letters and combos of letters and "decoded." Instead, they consider that language is a whole machine of making meaning, with words functioning in relation to each different context.

In English-talking nations in ordinary -with the exception of the UK, which has been encouraging faculties to undertake a systematic synthetic phonics strategy for the reason that 2011-studying instruction is typically more heavily weighted in the direction of the instructing of sight words, emphasizing the gaining knowledge of "word shapes". This method is based on the theory of constructivism learning, Piaget stated that studying constructive skills involves the energetic position of children in integrated learning with the intention that children can construct their knowledge independently (Fauzi & Basikin, 2020).

Word shapes. It looks like a ship.

They are told to look at words as if they were "pictures", focusing on the overhangs in the shapes of words. As you can see on the picture above, the word "they" Looks like a ship. So the children will see it as it was a ship and they will memorize the shape pd the word. Reading activities carried out for teens with storybooks, reading media and others by analyzing aloud and proper intonation so that it can carry out the kid's hobby (Fauzi & Basikin, 2020).

Phonics Approach

The phonics method focuses on the letters (or groupings of letters) of the alphabet as symbols for the sounds in words. The phonics approach itself encompasses a wide range of techniques and frameworks, but the two basic phonics teaching styles are synthetic and analytic phonics.

Children begin by decoding regular words and very basic sounds. They are gradually exposed to more complex sounds, anomalies, and exceptions, like letter combination sounds. Each level of phonics instruction is carefully prepared, and kids only advance to the following one once they have mastered the previous one. It depends on children learning the names of the letters and their sounds before teaching them the alphabet. It makes sense to use this to teach the kids new information about the sound if they are already familiar with the letters (Paris, 2019). Reading instruction is less regimented and learning occurs in a more "embedded" way with the Analytic Phonics method. It is advised for kids to examine collections of full words to find the comparable letter and sound patterns. The study of "families of words" plays a significant role in instruction. Thus, it is crucial

that pupils understand how letters and sounds relate to one another. Phonics is the knowledge that phonemes, or the sounds of spoken language, and graphemes, or the letters and spellings that represent those sounds in written language, have a predictable relationship (Paris, 2019).

For instance, the family of words ending up in -all, such as "tall, fall, mall, hall, small", or the family of words ending up in -at, such as "mat, cat, rat, bat, fat, pat".

All readers and writers of alphabetically written languages, like English, need to know how to use phonics. In order to effectively teach and learn using phonics, students must be able to recognize words fast and correctly. Phonics is one of the teaching methods that can aid students in understanding. the letter's sound when reading and writing. This method concentrates on the readers' knowledge of the letters and their ability to pronounce them correctly throughout reading activities (Paris, 2019).

C. Universal Four-Phase Reading Program

The four stages of word reading development identified by Ehri are pre-alphabetic, early alphabetic, later alphabetic, and consolidated alphabetic. For normal kids between the ages of four and six, each stage shows how word reading progresses. The visualization also shows how orthographic understanding and understanding phonetics are essential basic skills for kids to develop for them to achieve automatic sight word recognition (Moats, 2019). Children may be taught to read according to the following four phases (Steinberg, 1980). Each phase involves meaningful language.

Phase 1: Word Familiarization

This phase's goals are to familiarize students with the shapes of written words and to make them aware that distinct spoken language words have various written forms. We may affix words to various objects in the room for educational purposes, such as the chair, television, wall, flower, and table.

(Mukhtoraliyevna, 2023) The language used should be something the child can understand.

The word cards can be used for a variety of activities all over the room. These three exercises are word card sticking, matching, and room object pointing, in that sequence of increasing complexity. The child points to the printed word and the item to which it is attached while doing room object pointing. In word cards sticking, the child is instructed to attach a word card to an item that has been named. The child is given a word card and instructed to pick another that is similar to the activity of room object matching.

Phase 2: Word Identification

The child learns knowledge of which specific written words correspond to which specific spoken phrases or objects throughout that stage (Beyersmann, Wang, & Castles, 2022). For instance, a kid is expected to be able to point to the object "apple" (or its picture) or to pronounce "apple" when they see the written word "apple" alone.

Phase 3: Phrase and Sentence Identification

'Word Identification'-like in nature, this phase makes use of larger linguistic units (Rahman & Halim, 2023). To read a sentence, which is a fundamental linguistic construction, is the objective. For instance, the dog is barking at the boy. The best sentences and phrases are those that are specific to the situations that are present at the time. For instance, Diane fell.

Phase 4: Paragraphs, Stories, and Book Reading

The most significant written language unit is text. It consists of several sentences that are connected, usually two or more. Texts include things like stories and poems. Books may contain fewer illustrations and more text as the child gains skills in reading (Torr, 2023). Students must always follow three rules to get adapted to different types of reading, including teaching short stories, teaching reading books, and reading books must

always be done. This phase's objective is to give children the information and abilities they need to comprehend text fluently. On the other hand, stories should be recorded and books should be read as soon as a child can to follow along. The child should be able to read the text and observe the words and sentences being pointed out. Such activities will familiarize the child with books and increase their interest so that they are ready when text reading is presented.

D. The Advantages of Early Reading for Preschool-Age Children

Reading is a great method to open up a child's world to imagination and creativity. Reading to young children can cultivate a love of an activity that also helps the development of the brain while teaching them a skill that they will need for the rest of their lives. Ningsih et al. (2019) stated that discovered that reading skills can help children think critically and solve difficulties. Without good reading skills, children would encounter many difficulties finishing academic assignments since they hardly comprehend what they read (Qrqez & Rashid, 2017) According to studies, kids who are exposed to reading before they start preschool have a tendency to grow their vocabulary and are more likely to do well in school. The research cited above on teaching reading to pre-school-age children, along with the studies of Fletcher-Flinn, Thompson, and Terman, demonstrates that children can learn to read at a very early age. Of course, how successful a method is relying on how it is used. All youngsters above the age of two can use the Steinberg teaching program described above. Success will unavoidably result from placing an emphasis on complete, meaningful language in a personal context and teaching these concepts through the use of games and other engaging activities.

In early childhood shared reading is an engaging experience of reading in a pair when adult kids are reading together at home or in a place for young children. The adult reads aloud and asks the child question as they read (Hoyne and Egan, 2019). One type of shared reading that is deemed effective in

promoting young learners" reading skills and positive attitudes toward reading is dialogic reading. However, teachers and parents have not frequently practiced this activity in our Indonesian context.

In order for all children to become proficient readers, Leutzinger (2022) emphasized the instruction of phonics, phonemic awareness, fluency, vocabulary, and basic understanding as five crucial and interconnected sub-skills. According to Wang and Lee (2020), developing a beginning reader's critical phoneme awareness and alphabetic principle through formal education is essential for helping them read words accurately and quickly. These findings have drawn attention to the need for young children to learn how to understand what they read with the assistance of adults.

It is important to note that Phonics/Decoding-type techniques were not employed in any of the claimed successful research on early reading. All adopted a Whole-Word strategy. That this should be the case is not a coincidence, as these studies make use of children's innate aptitudes for learning to read. Most 2-year-olds are prepared to learn to read, as was previously said.

Why Early Reading is Beneficial?

There are a number of important advantages of teaching reading to children in their preschool years:

1. **Reading is a source of pleasure for the child.** It satisfies and stimulates a child's natural curiosity and, as a source of knowledge, enriches the child. The earlier a child discovers this, the more enriched and more deeply attracted to reading the child will become.
2. **Love of reading is established.** The warm supportive informal atmosphere of the home or the pre-school provides an excellent situation for learning. In such a situation, a positive attitude towards reading can be established without the difficulties that are often encountered in elementary school.

3. **Young children learn quickly and easily.** They have a remarkable rote-memory learning ability and can easily acquire a multitude of written words. The older the children get and the poorer their memory, the more they require additional exposure and practice.

4. **The children grow up to be better learners.** They will be able to read faster and with better comprehension than they would if they were to start reading later.

In addition to these advantages, there is another important general one. Children who learned to read early would not have to use time in elementary school to learn to read. More time therefore could be devoted to acquiring other kinds of knowledge. This could have the effect of improving the educational level of children in all areas of knowledge. That being the case, early reading can significantly benefit the whole of society.

Learn How To Read Using English Phonetics Strategy:

The reason why we choose the English phonetics strategy is that it is more effective than the whole word strategy. One of the main objections to phonics-based reading instruction is that it reduces words down into letters and syllables that have no real meaning. English is an alphabet-based language, in contrast to Chinese. This indicates that, unlike Chinese symbols, the letters of the English alphabet are not ideograms (also known as ideographs). Therefore, the extremely well-liked reading programs that employ a whole-word strategy only teach kids how to recall words using various techniques without imparting any knowledge of effective decoding techniques. They are instructed to focus on the overhangs in the shapes of words and to view them as "pictures"! English is an exception to this rule. Once more, ideographic languages like Chinese or Japanese adopt this technique.

Instruction

1. The students will watch the video about the material that will be given by the instructor.
2. The instructor will enlighten the material to the students.
3. The instructor will give exercise how to spell a word.
4. The students will try to pronounce the word properly.
5. The instructor will give a paragraph to the students, to test their reading ability.

Please, scan the barcode below!

Link Video YouTube

Vowels		Diphthongs		Consonants			
iː	bead	eɪ	cake	p	pin	s	sue
ɪ	hit	ɔɪ	toy	b	bin	z	zoo
ʊ	book	aɪ	high	t	to	ʃ	she
uː	food	ɪə	beer	d	do	ʒ	measure
e	left	ʊə	fewer	k	cot	h	hello
ə	about	eə	where	g	got	m	more
ɜː	shirt	əʊ	go	tʃ	church	n	no
ɔː	call	au	house	dʒ	judge	ŋ	sing
æ	hat			f	fan	l	live
ʌ	run			v	van	r	red
ɑː	far			θ	think	j	yes
ɒ	dog			ð	the	w	wood

The sun is the only star in our solar system and is present at the centre of all the planets. All eight planets revolve around the sun. The sun is known as a gaseous ball as it is made up of different gases. It is a massive ball of gases but looks very small from the earth because of its distance. The sun's diameter is 110 times that of the earth, and the sunlight reaches the earth in 8 minutes and 17 seconds. It is a

massive source of heat and light to the earth. Humans, plants, animals, etc., cannot grow without the sun's rays. Our days cannot start without the sunrise. When it is a cloudy day or a winter morning, we all wait for the sun to come out, but we take a lot of protection to stay away from the sun when it is a hot summer day. Without the sun, the whole world would turn into darkness. It is mainly needed during the winter days. The sun's rays are needed for humans as it is a rich source of vitamin D, but not all sunrays are essential. A few rays, called ultraviolet rays, are harmful to the environment.

ðə sʌn ɪz ði ˈəʊnli stɑːr ɪn ˈaʊə ˈsəʊlə ˈsɪstəm ænd ɪz ˈprɛzᵊnt æt ðə ˈsɛntər ɒv ɔːl ðə ˈplænɪts. ɔːl eɪt ˈplænɪts rɪˈvɒlv əˈraʊnd ðə sʌn. ðə sʌn ɪz nəʊn æz ə ˈɡæsiəs bɔːl æz ɪt ɪz meɪd ʌp ɒv ˈdɪfrənt ˈɡæsɪz. ɪt ɪz ə ˈmæsɪv bɔːl ɒv ˈɡæsɪz bʌt lʊks ˈvɛri smɔːl frɒm ði ɜːθ bɪˈkɒz ɒv ɪts ˈdɪstəns. ðə sʌnz daɪˈæmɪtər ɪz 110 taɪmz ðæt ɒv ði ɜːθ, ænd ðə ˈsʌnlaɪt ˈriːʧɪz ði ɜːθ ɪn 8 ˈmɪnɪts ænd 17 ˈsɛkəndz. ɪt ɪz ə ˈmæsɪv sɔːs ɒv hiːt ænd laɪt tuː ði ɜːθ. ˈhjuːmənz, plɑːnts, ˈænɪmᵊlz, ɪtˈsɛtrə., ˈkænɒt grəʊ wɪˈðaʊt ðə sʌnz reɪz. ˈaʊə deɪz ˈkænɒt stɑːt wɪˈðaʊt ðə ˈsʌnraɪz. wɛn ɪt ɪz ə ˈklaʊdi deɪ ɔːr ə ˈwɪntə ˈmɔːnɪŋ, wiː ɔːl weɪt fɔː ðə sʌn tuː kʌm aʊt, bʌt wiː teɪk ə lɒt ɒv prəˈtɛkʃᵊn tuː steɪ əˈweɪ frɒm ðə sʌn wɛn ɪt ɪz ə hɒt ˈsʌmə deɪ. wɪˈðaʊt ðə sʌn, ðə həʊl wɜːld wʊd tɜːn ˈɪntuː ˈdɑːknəs. ɪt ɪz ˈmeɪnli ˈniːdɪd ˈdjʊərɪŋ ðə ˈwɪntə deɪz. ðə sʌnz reɪz ɑː ˈniːdɪd fɔː ˈhjuːmənz æz ɪt ɪz ə rɪʧ sɔːs ɒv ˈvɪtəmɪn diː, bʌt nɒt ɔːl sunrays ɑːr ɪˈsɛnʃəl. ə fjuː reɪz, kɔːld ˈʌltrəˈvaɪəlɪt reɪz, ɑː ˈhɑːmfʊl tuː ði ɪnˈvaɪərənmənt.

REFERENCES

Abhishek, P., Carlos, V., & Charles, S. (2020). The sound of branding: An analysis of the initial phonemes of popular brand names. *Brand Management*, 339-354.

Amanda, L. L., Kausalai, W. P., & R., M. P. (2022). English Spelling Performance in Writing Samples Among Spanish-Speaking ELLs. *Learning Disabilities, 55*(2). doi:https://doi.org/10.1177/0022219420982995

Anita, A., Denis, R., Camille, M., & Tino, O. (2019). *Revisiting the Medieval North of England: Interdisciplinary Approaches.* United Kingdom.

Anna, L., & Julie, E. D. (2020). The Impact of Orthography on Text Production in Three Languages: Catalan, English, and Spanish. (A. M. Eva , Ed.) 1-14. doi:10.3389/fpsyg.2020.00878

Beyersmann, E., Wang, H. C., & Castles, A. (2022). *Oral vocabulary knowledge and learning to read new words: A theoretical review*.

Charles, A. P. (2020). Script Effects as the Hidden Drive of the Mind Cognition, and Culture. *Literacy Studies, 21*, 71-105.

Donald, S., & Carol , A. F. (2019). Relations Between Reading and. *Annual Review of Linguistics*, 29-109.

Jodie, L. E., Julia, M. C., M. Luisa, T. B., & Helen, L. B. (2019). The roles of morphology, phonology, and prosody in reading and spelling multisyllabic words. (H. H. Rachel, Ed.) *Applied Psycholinguistics*, 1469-1817.

Linda , S., Anas, S., & Dyah Aminatun. (2021). THE CORRELATION BETWEEN EFL LEARNERS COHESION AND THEIR READING COMPREHENSION. *RESEARCH ON LANGUAGE EDUCATION, 2*, 68-74. doi:https://doi.org/10.33365/jorle.v2i2.1154

Mark, J., J.C, Y., & McDougall. (2022). *Greek and Roman Education: A Sourcebook.* USA: Routledge.

Moats, L. (2019). *Teaching Spelling An Opportunity to Unveil the Logic of Language*.

Mukhtoraliyevna, Z. S. (2023). *USE OF MODERN TEACHING METHODS IN MOTHER LANGUAGE AND READING LITERACY LESSONS OF PRIMARY CLASS*.

Peter, T. D. (2021). Foundations of graphonomy. *Cultural Cognitive Science*, 113-123.

Philip , J. B., & Philippa, M. S. (2020). *Understanding Relations Between Scripts II Early Alphabets.* United States: OXBOW BOOKS.

Rahman, A. U., & Halim, Z. (2023). *Identifying dominant emotional state using handwriting and drawing samples by fusing features*.

Torr, J. (2023). *Reading Picture Books with Infants and Toddlers: Learning Through Language*.

Xingshan, L., Linjieqiong, H., Panpan, Y., & Jukka, H. (2022). Universal and specific reading mechanisms across different writing systems. *Nature Reviews Psychology*, 133-144.

UNIT 4

WILD AND ISOLATED CHILDREN AND CRITICAL AGE FOR LANGUAGE LEARNING

Learning Objectives:

1. Understanding human limits and capabilities in language learning.
2. Exploring the role of the social environment in language learning so that we can understand how a rich and supportive social environment contributes to better language learning.
3. Identifying critical periods in language learning which important for designing effective language learning approaches, especially in the context of second or foreign language learning
.

Introduction

The aim is to provide an informative reference for the students. The chapter tends to help students to gain knowledge about interesting cases related to children's wild and isolated language acquisition as well as where the knowledge of language itself actually comes from.

The chapter consists of explanations which are then accompanied by individual and group assignments. The main teaching objectives in this chapter are to provide students with competence in analyzing cases, understanding expert theories, and doing exercises. By the end of this chapter, we hope you have gained a foundation of knowledge in both the theory and processes.

A. Wild and Isolated Children

It seems that people have always wondered whether, even without experiencing language, children are able to produce speech on their own. Over the past few centuries there have been a number of reported cases of children raised by wolves, dogs, pigs, sheep, and other animals. These children are known as wild or feral children. They lived alone and apart from other people since they were very young. They have little to no knowledge of human care, love, or social conduct, and, most importantly, human language. Meanwhile, children who are held in confinement by their parents for various reasons are referred to as isolated children. Sometimes, parents will reject their children because of their severe physical or intellectual disabilities.

> **iNSiGHT**
>
> Despite the differences between the individual cases, most feral and isolated children:
> 1. find it difficult to speak a language; this had led to the belief that there is a crucial period in the development of children when they need to hear and start to speak a language
> 2. find it hard to adapt to normal food; for example, they may prefer uncooked meat
> 3. do not like wearing conventional clothing
> 4. may not walk upright, preferring to walk on all fours
> 5. may seem uninterested in other people and unable to understand how others might see them and read to them.

Children who have been inadequately socialised are unable to fit into society. The study of feral and isolated children shows that humans are social. We need other people around us. Children who live isolated from other people cannot interact, speak a language or learn to love. They cannot develop normally and are damaged by the experience. They have difficulty adjusting to life in a human culture.

In some cases the damage may be so great that they never learn to do the things most humans do, especially to communicate. In a sense, these children are not completely human. They are biologically

human but they are unable to be part of the essential human experience.

Studies of feral and isolated children leave some unanswered questions because of the variety of cases and doubts about the validity of some reports. Media reports tend to emphasise how different feral children are from socialised children; for example, commenting on their wild appearance.

Read the case story below!

Oxana Malaya

> Oxana, a young girl, was found in a kennel in the family's Ukrainian town home's backyard in 1991. She was born in 1983, and according to her medical history, she is a healthy child. Oxana, age 3, was abandoned outside one day due to her parents' alcoholism. She climbed into a dog house in need of protection, and for the next five years a dog definitely helped her survive by giving her food and warmth. When Oxana was discovered, she moved on all fours and acted like a dog. She could hardly speak, usually barked, and didn't seem to think that communicating was important. She was limited to the words "yes" and "no," but she lacked even the most essential human abilities, like washing. She instead groomed herself like a dog. She can now speak in short, simple sentences due to her improved speech, but she still finds it hard to connect with others. Similar to Genie's circumstances, Oxana's development appears to hit a wall and stop. They have been trying to get her a job and educate her how to live among people, but most likely she will never be considered a normal person again, says her psychiatrist, Vladimir Nagorny.

iNDiViDUAL TASK

Take a look the question below! Answer the following question according to what you have read and the previous case story.
1. Based on the Oxana Malaya case, what do you think is the role of parents in children's language development?
2. Why do you think feral or isolated children struggle to adapt in society?
3. An american girl, Genie, was home by her father for the past 12 years until she turned 13 years old. Do you think there will be a chance for them to return to locked in a small room in her normal? If there is, how?

There are plenty of other stories of children raised by animals in alongside Oxana Malaya, such as Victor: the Wild Boy of Aveyron. On a different level, there are cases of kids who were kept in confinement or isolation by their parents or other people and didn't get exposed to language as a result. Investigating such examples may shed light on certain psycholinguistic issues.

1. **Victor: the Wild Boy of Aveyron**

When a boy was found by hunters in the woods close to the village of Saint Sernin in the Aveyron region of France in January 1800, scientific inquiry into the issue of wild children grew significantly.

Source:
https://www.google.com

iNSiGHT

The interested reader is urged to view the excell ent movie, The Wild Child, (it's original French title is L'Enfant Sauvage), made by François Truffault ' in 1969, which portrays the story of Itard and Victor.

a. Victor's speech training process failed

Soon after, an intelligent and dedicated teacher named Jean-Marc-Gaspard Itard was given the task of teaching the kid. Itard established a comprehensive program with social and language learning as primary goals. Itard gave the Wild Boy the name "Victor," and the Wild Boy's schooling started with tough work that involved various kinds of games and activities that Itard developed to socialize Victor and make him aware of his surroundings. These had a surprisingly positive result.

Itard found working on his speech with Victor to be quite frustrating. The

main focus was just getting Victor to repeat various words and speaking sounds. Victor eventually developed the ability to tell spoken sounds apart from other noises in his environment. Victor could understand speech in the form of instructions for doing duties around the house and would make a particular sound if he wanted to ride in a wheelbarrow. However, it was unclear if language itself served as the means of communication or whether it was simply a matter of understanding contextual context.

Itard worked with Victor for five years. He tried to teach him to talk again toward the conclusion of that time. These initiatives were also unsuccessful, and Itard eventually made the decision to part ways with Victor. He made plans for Victor to share a residence with Madame Guérin. Victor remained quiet all his 18 years there, dying in 1828 at the age of roughly 38.

b. Victor's reading and writing learning process successful.

Itard made the decision to give up on trying to teach Victor language through speech imitation and instead focused on advancing the boy's perception abilities. He then started teaching Victor the alphabet using the letters on individual cards after having an excellent notion. The youngster was taught the word for milk, lait, once more, but this time it was written out in alphabetical order. Since he had initially seen it from across the table, Victor was able to spell it out, first backwards and then upside down. Victor did eventually improve his reading skills. Victor initially understood written words like "book" to refer to a particular object, a specific book, but over time he came to correlate the words with categories of objects.

He initially used word cards to interact with other people. Later, from memory, he was able to write the words himself. Itard was able to produce a report in less than a year that essentially stated that Victor's senses, memory, and attention were unharmed, that he was capable of comparison and judgment, and that he could

read and write to some level. However, Victor's speech did not get any better, and Itard was worried about it. He could have helped Victor a lot by continuing to teach reading, but he did not.

2. Helen Keller: The Renowned Deaf and Blind Girl

Any discussion of language deprivation cannot be considered complete without the case of Helen Keller (1880–1969). Keller was born normal and then, due to illness, she became deaf and blind at the age of 19 months. Thus, before tragedy struck, she had already experienced some degree of language learning and would probably have had some degree of comprehension and production. That was the extent of her language exposure until six years later in 1887, at age 7, when Anne Sullivan Macy came to teach her language. Macy, herself partly blind and only 21 years old, was engaged by Keller's parents on the recommendation of Alexander Graham Bell.

Helen Keller
Source:
https://www.thought.com/

iNSiGHT

How did Keller acquire the same level of language skills that she did? It could be argued that Keller's achievement was positively influenced by the brief experience she had with speech in her early years. However, the fact that it took her as long as it did to learn her first word, "water," after a long six-year period of not having any exposure to language, indicates the benefits of her pre-illness exposure to language were insignificant.

a. Helen learns language

Helen learned language through touch and gradually took up speaking. Helen did this by directly touching Sullivan Macy's and other people's mouths, lips, vocal chords, throats, and other speech articulators on their faces. (Sullivan Macy received her training at the Perkins Institute for the Blind in Boston, where she also learned communication strategies for instructing blind and deaf people.)

Even though Helen was unable to hear and receive any auditory feedback of her own speech, she nevertheless was able to produce speech even though she could not receive any auditory feedback. While recognizable, her speech was somewhat strange, since she spoke in a high-pitched monotone manner (similar to that of the high-pitched voice of Genie). Helen went on to learn to read and produce Braille.

b. The essential aspect of language

It had been established that a sound, sign, or touch could represent an object—the essential aspect of language. It is interesting that Helen was able to think clearly about her existence and later write about it despite not having words for the settings and actions she describes before learning her first word. Kellerwent on to graduate with honors from Radcliffe, the women's division of Harvard University at the time, and go on to become a well-known author and lecturer who works with disabled people all over the world

B. Critical Age for Language Development
1. What is Critical Age?

A critical age is a limited span of time during which someone is sensitive to external stimuli and capable of acquiring certain skills. When it comes to the critical time for language development, one question has long baffled parents, teachers, and researchers:

a. When should a child begin learning?

More recent research are begin to give a clearer picture, although the answer is still not quite clear. A critical age for children to learn their first language has been theorized to last throughout late childhood and potentially until puberty. According to additional studies, there is a "critical phase" for language learning, which has lead scientists to assume that learning a new language is more challenging for adults than for children.

b. Is critical age or period really exist?

According to common beliefs, learning a language is most effective when it starts in early years. Early language instruction can give children the chance to acquire native who start learning the language, the more resembling a natural speaker they will be. With the introduction of Lenneberg's Critical Period Hypothesis (CPH) theory in 1967, this concept first developed which indicates that language can fully develop between the ages of two and fourteen, before to the onset of puberty. This could imply that children who start learning a language later in life won't be able to fully develop their linguistic abilities. Lenneberg's research mainly focused on how children learn their first language. However, he did make the assumption that his results might also be relevant to learning second languages.

Why did Genie not fully acquire linguistic skills? Why did Genie not gain more knowledge than the other did? Children won't learn language if they aren't exposed to it, to take place, children must be exposed to something, whether it be speech, signs, writing, touch, or another kind of communication. This exposure should be provided as early in the child's life as feasible.

Joshua Hartshorne, an assistant professor of psychology at Boston College state that individuals who begin learning a language between the ages of 10-18 will still pick it up fast, but because they have less time before their learning capacity drops, they will not be as proficient as native speakers

Take a look at the questions below!

By reviewing the facts of the instances of Genie we can pinpoint two key elements that may have contributed to their levels of language acquisition success. The first, the age at which language exposure started. Secondly, the severity of any physical, psychological, and social trauma that occurred before language exposure.

Answer the following questions according to what you have read in the previous material explanations!

iNDiViDUAL TASK

1. What is critical age?
2. List and explain the experts' opinions on critical age!
3. Explain more about the key elements that may have contributed to the levels of language acquisition success!

GROUP ACTiViTY

Form a group consists of 5 people. Then, use the internet or other resource to find out about another feral or isolated child. Collect complete data (picture, video,etc). You research:

- Genie Wille y, the America's feral child.
- Isabelle: Co nfinement with a mute mother
- Suchet: the Bird Boy of Fiji

Once the information and data have been collected, present them in group so the class!

2. All language Learners are Different

Individual "critical age or period" for language development can vary significantly, even for their mother language, depending on several environmental circumstances. In specific ways, the earlier kids are exposed to foreign languages, the better; if the language is introduced in infancy or early childhood, children are more likely to be able to imitate sounds, understand sentence patterns, and use proper intonation at the level of native speakers.

Some parents may be concerned the teaching their child an additional second language in the early years may confuse them or prevent the growth of their child's "first"

? | How to introduce a second language to a child?

You can introduce lan guage to a child at any age and in several ways, depending on what is best for that particular child. Here are some tips for introducing and encouraging language in your child.

a. Infancy (Age 0-2)

Exposure is crucial to language development at this stage. The more a child hears a language spoken by a native, the easier it will be for them to mimic and understand those sounds. Do this: Songs or stories.

b. Early childhood (Ages 3-6)

Children actively learn their surroundings early on. Given that these kids naturally learn via play, teaching them a second language through play is one of the most remarkable ways to do so. Do this: Introduce the language through entertaining activities to get kids enthusiastic about learning a language. Encourage them to use what they have learned in practice after that.

c. Middle childhood (Age 7-10):

Creativity and self-expression are some of the best learning strategies you can promote for children at this age since they are starting to recognize and convey who they are. Do this: By asking children to write stories, skits, or

poems relying on their new language skills, you can try to develop their creativity as they are learning a new language. Do not worry if it is not precisely fitting. The idea is to get them talking!

d. Adolescence & adulthood (Age 11+)

These language learners can more easily participate in practical conversations with others because they can fully understand the more abstract and contextual parts of language and are already quite familiar with the context! Do this: Introduce language and topics in the new language that are relevant to their daily life. It can be various topics, such as grocery things and pop culture.

ANIMAL AND LANGUAGE LEARNING

Learning Objectives :

1. Students can understand why we need to learn how animals communicated
2. Students are able to understand how certain animals communicated
3. Students are able to know the difference between how animals & humans communicated

Material Description :

1. Introduction
2. How Animals Communicated
3. Difference Between Human and Animal Language
4. Technology In Helping Human To Learn Animal Language

Introduction

Animal learning refers to the process by which animals acquire the knowledge and skills necessary for survival, while language learning specifically refers to the acquisition of communication abilities in humans. Examples of animal learning abound in the animal kingdom, such as birds learning to sing by imitating their species' songs, monkeys and apes learning tool usage for obtaining food, and animals mimicking warning calls to evade predators. However, humans possess a distinct capacity for acquiring complex language. Language acquisition begins in infancy, as babies learn to differentiate sounds in their native

language and gradually grasp the rules of grammar and syntax, ultimately gaining the ability to speak and understand their mother tongue. The structure of many animal vocalizations can be described by such algorithms as probabilistic or hidden Markov models (Berwick et al., 2011; Hurford, 2012; ten Cate et al., 2013; ten Cate & Okanoya, 2012). Several authors have suggested that such models may reduce the gap between human and animal linguistic abilities (Hurford, 2012; Kershenbaum et al., 2014; ten Cate et al., 2013).

Dolphins provide a compelling instance of animal language learning, utilizing a sophisticated system of whistles and clicks to communicate with each other and respond to human commands. Bees also exhibit language learning as they communicate the locations of food sources within their hive through dances and pheromones. While animals display diverse learning and communication abilities, human language acquisition stands out due to its complexity. Although certain animals, such as primates, birds, and dolphins, can communicate more elaborately, their abilities fall short of the intricacy with which human language conveys ideas and concepts. Language remains a unique and defining characteristic of the human species.

The study of vocal learning in songbirds served as inspiration for training a Grey parrot in referential speech, drawing parallels between the acquisition of bird songs and human language learning. Results from various research labs yielded divergent yet complementary findings. These studies held significant implications, coinciding with the emergence of competing theories on language acquisition in children and shedding light on the potential of non-human species. Researchers debated the extent of non-human learning and questioned the validity of the claims being made. Furthermore, these studies propelled further investigations into child language acquisition and cognitive development.

In 1980, a conference on zoosemiotics and nonverbal communication sparked controversy due to the participation of non-scientists, leading to allegations that scientists were prompting apes and overinterpreting their signs. Consequently, language

studies conducted in laboratories were abandoned, and research shifted toward using two-way communication systems to examine cognitive processing and symbolic representation. These studies delved into rule-governed behavior, perception, cognition, and symbolic equivalence in non-human animals. Some researchers focused on studying symbolic communication in comparative cognition, while others explored receptive capacities in dogs and sought to understand communication in natural contexts.

The studies demonstrated that non-human animals had acquired significant knowledge and possessed a shared neural architecture that enabled them to engage in symbolic representation and rule-governed behavior. However, obtaining grants for such studies became increasingly challenging over time. For example, the Rumbaughs conducted research on symbolic communication in bonobos and common chimpanzees, comparing their abilities to understand symbols and sentence structures. Other studies examined the impact of social interaction on these animals. Additionally, researchers investigated receptive capacities in dogs and explored communication in monkeys, songbirds, and toothed whales.

Although these studies did not involve teaching animals to use language, they contributed to our understanding of their ability to achieve symbolic representation and engage in rule-governed behavior. Nevertheless, obtaining grants for such studies became more difficult, and animal rights activists used the data to advocate for regulations that would prohibit the study of apes and marine mammals.

Consequently, numerous opportunities to study non-human animals as models for understanding our ancestral abilities have been lost, including the potential to investigate other vocal learners like elephants. However, there are still unanswered questions, such as the disparities in imitation capabilities between humans and non-human animals and the potential for apes to acquire language through appropriate training. Advances in our understanding of brain structures and connectivity now allow researchers to delve

deeper into the precursors of modern human languages and gain insights into the types of brains our ancestors may have possessed.

A. How Animals Communicated

Some animals, such as parrots, dogs, monkeys, birds, worker bees, and dolphins, have language-like means of communication. However, their communication mechanisms differ from humans.

1. Bees' dances

    Bees are known to communicate the location of food sources using complex "dances."

2. Whales' songs

    During mating season, male humpback whales perform whale songs to aid sexual selection. Humpback whale songs are also used as feeding calls that can last between 5 to 10 seconds.

3. Prairie Dogs' alarms

    Prairie dogs use different alarm calls that contain descriptive information about predators including their color, size, and traveling speed. These alarms signal different types of escape behaviors for different species of predators.

4. Caribbean Reef Squid's appearances

    Squids are capable of communicating by manipulating their color, shape, and texture. For example, while performing mating rituals, squid use patterns, color, and flashing to communicate with one another.

Not only those for example above according to Field (2003), some primate species also can learn human language if properly taught By using specific lexical feature patterns in the form of universal grammar, these primates are likely to eventually acquire or learn human language in its entirety, in animals (preferably mammals). May provide evidence. And here are some example of primates that able to communicate to human :

1. **Koko**

   Arguably the most famous nonhuman primate in the research of animal language was the western lowland gorilla named Koko. She was able to learn more than 1,000 signs and could comprehend over 2,000 words from the English language. The work researchers did with Koko helped contribute to the argument that some animals may, in fact, be able to learn the human language, at least to the level of a small child.

   Scan here to watch Koko's video

2. **Kanzi**

   Another famous nonhuman primate is Kanzi. Kanzi was a bonobo who had 354 words in his vocabulary and was the first nonhuman primate to seemingly understand syntax in spoken English. When asked for the first time to "make the dog bite the snake," Kanzi put the snake in the dog's mouth (Myers, 2018).
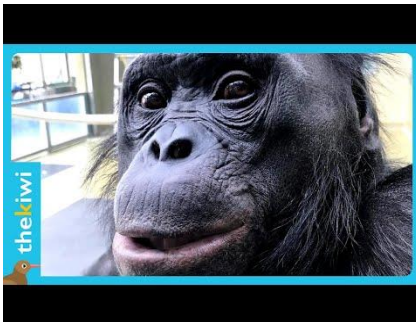
   Scan here to watch Kanzi's video

B. Difference Between Human and Animal Language

First, humans are unique in that we all possess a version of a gene that enables us to move and coordinate our lips, tongue, and vocal cords required for speech. Another major difference between human and animal language is that animals do not have the reasoning skills to understand syntax.

Humans can have multiple sounds or gestures that signify one object and can even combine sounds or gestures to produce new symbols with different meanings. In contrast, nonhuman primates have a closed vocal system which means they cannot combine sounds to produce new symbols. Other difference:

DIFFERENCES	HUMANS	ANIMALS
Creativity	Humans can easily invent new words, i.e., supercalifragilistice xpialidocious	Evolution is the only way animals change their signs.
Cultural Transmission	Human words must be learned and acquired culturally.	Animal communication is biological, and they are born with it. However, this is what makes the case of Washoe so extraordinary because she was able to teach her foster son words in sign language.
Displacement	Humans can talk about things that are not in their immediate environments. (i.e., you can talk about your brother even	Animal communication is only driven by stimuli in their immediate environment.

DIFFERENCES	HUMANS	ANIMALS
	if he's not in the room)	
Arbitrariness	Human language can be symbolic, allowing us to preserve ideas or events.	Animal communication cannot be symbolic and, therefore, cannot capture ideas.
Metalinguistic	Humans can discuss language itself.	Animals are incapable of the abstract thinking required to talk about language.

C. Technology in Helping Human to Learn Animal Language

Technology has the potential to assist humans in learning animal languages, enabling communication and understanding between different species. Here are some ways in which technology can contribute to this field:

1. Animal Vocalizations and Acoustic Analysis
   a. Technology can record and analyze animal vocalizations, such as bird songs, whale calls, or primate vocalizations, to identify patterns and meanings.
   b. Advanced algorithms can be employed to detect and classify different vocalizations, helping researchers and individuals learn the structure and meaning behind animal communication.

2. Language Translation Tools
   a. Similar to language translation apps or software, technology can be developed to translate animal vocalizations or gestures into human languages.

b. Machine learning algorithms and natural language processing techniques can be applied to decode and interpret animal communication signals, facilitating human understanding.

3. Wearable Devices and Biosensors
   a. Wearable devices equipped with sensors and biosensors can monitor physiological and behavioral responses in animals.
   b. These devices can detect changes in heart rate, body temperature, or movement patterns, providing insights into an animal's emotional state and facilitating better understanding of their communication cues.

4. Visual and Gesture Recognition:
   a. Technology can be used to analyze visual signals and gestures exhibited by animals.
   b. Computer vision techniques can recognize and interpret body language, facial expressions, or tail movements, aiding in the comprehension of animals' intentions and emotions.

5. Augmented Reality (AR) and Virtual Reality (VR)
   a. AR and VR technologies can create immersive experiences that simulate animal habitats and behaviors, allowing individuals to observe and interact with animals in a controlled environment.
   b. Such simulations can help humans learn the nuances of animal communication by providing realistic scenarios and feedback.

6. Citizen Science Initiatives and Mobile Apps
   a. Mobile apps can engage citizen scientists in collecting data on animal behaviors and vocalizations.
   b. These apps can provide guidance on data collection protocols and assist in recording and reporting animal communication, expanding the knowledge base for studying and understanding animal languages.

7. Collaboration and Data Sharing Platforms
   a. Technology can facilitate collaboration among researchers and individuals interested in learning animal languages.
   b. Online platforms can serve as repositories for animal communication data, fostering collective learning and enabling the development of comprehensive datasets for analysis and interpretation.

It is important to note that while technology can provide valuable tools for learning animal languages, it is still a challenging endeavor due to the complexity and diversity of animal communication systems. Additionally, the context and cultural factors influencing animal behaviors must be considered for accurate interpretation. Technology should be seen as a complement to other research methods and approaches rather than a standalone solution.

D. Exercise

1. **Fill in the crossword puzzle below with animal names and read the clues provided!**

ACROSS

1) I can release a net from my body.
2) I am an insect species that has two stomachs but doesn't have lungs.
3) I am a bird species that has a beautifully tail.
4) I am a warm-blooded animal, a large predatory bird.
5) I am a winged scale insect with striking features of colorful patterns on my body.
6) I am a mammal that is commonly raised and kept as livestock, a herbivore, and closely related to sheep.
7) I am one of the fist type of animals to be domesticated for agricultural purposes and are raised for the utilization of your hair, meat, and milk.
8) I am a type of bird that is active during the night.
9) I am a group of insects that belong to the order Coleoptera.
10) I have a large body and people utilize my milk. I am typically used as a sacrificial animal during Eid al-Adha.
11) I like eating bananas.
12) I am typically ridden by someone to assist in pulling a horse-drawn carriage
13) I am a bird that has the ability to mimic human voices.
14) I usually live in water and I have claws.
15) I am an animal with the lonest neck in the world
16) I am a type of animal that is closely related to cows. I have a secretive nature and am very cautious, making it difficult for humans to approach me.
17) I am the fastest bird in the world.
18) I am a predatory bird and a nocturnal animal.
19) I am an intelligent marine mammal.
20) I am one of the social animals that live in group or herds. I possess great hunting strategy abilities in the wild.

---

21) My main distinctive feature is having antlers, which are bone growths that grow and shed every year.
22) I am a scaly animal, without legs, and I hiss.
23) I am a mammal that resembles a wolf, a predator and meat-eater, as well as a loyal pet.

Scan here to see the online table!

2. **Match the words to their (near) synonyms!**

1) Animal	a) Mimicry
2) Language	b) Body language
3) Communication	c) Language structure
4) Training	d) Educational strategies
5) Cognition	e) Eloquence
6) Intelligence	f) Beast
7) Verbal	g) Tongue
8) Non-verbal	h) Interaction
9) Imitation	i) Linguistic
10) Training methods	j) Word order
11) Syntax	k) Discourse
12) Speech	l) Smartness
13) Vocabulary	m) Mental processes
14) Expressiveness	n) Lexicon
15) Grammar	o) Coaching

UNIT 6

CHILDREN VS ADULTS IN SECOND-LANGUAGE LEARNING

Introduction

The chapter entitled "Children vs. Adults in Second Language Learning". This is designed to explore the differences and similarities between children and adults in the process of learning a second language. Along with globalization and the growth of human mobility, the ability to communicate in a second language is increasingly important in everyday life.

Second language learning has become an interesting topic in the field of education. There is an ongoing debate about whether children or adults are more effective at learning a second language. Some research shows that children tend to absorb and master a second language more easily, while others argue that adults have advantages in certain aspects.

This chapter will examine some of the factors that influence children's and adults' ability to learn a second language. We will explore the differences in cognitive, social, and psychological aspects that affect their learning process. In addition, we will explore effective learning strategies for children and adults in the context of learning a second language.

This chapter will provide a better understanding of how children and adults differ in learning a second language. With this understanding, we can develop learning approaches that are more effective and focus on the special needs of these two groups. Enjoy learning and hopefully this provides valuable insights into second language learning!

A. Background

This chapter aims to explore the key differences between these two groups in the second language learning process and provide appropriate strategies and methods for each group. The importance of this chapter relates to the understanding that an approach that is effective in teaching children is not always the same as one that is effective in teaching adults. This chapter will discuss how children and adults process and understand a second language, as well as strategies and techniques that are effective in facilitating their learning. In addition, the preparation is also based on existing research and literature in the field of second language learning and language teaching, both focusing on children and adults. The aim is to provide resources supported by the latest scientific evidence and research to ensure the accuracy and relevance of the information conveyed.

By understanding the differences between children and adults in learning a second language, it will help educators and instructors to design effective and motivating learning programs for each group. It can also be a valuable guide for individuals wishing to improve their own second language skills, taking into account their unique and age-related learning characteristics.

B. Short Description

In this chapter there are several sub-chapters that will be discussed related to the title of the material, namely "children vs adults in second-language learning". Some of these sub-sections include:

1. The common belief: children are better than adult?
2. Basic Psychological factors affecting in learning L2
3. Social situations affecting L2 learning
4. Critical age for second-language learning

C. Benefits

In preparing this chapter, the readers or students will know how children and adults learn a second language. It is explained whether it is true that children are better than adults in learning languages, what factors influence learning a second language, and whether there is a critical age in learning a second language.

D. Learning Objectives

The learning objectives of this material are:

1. Students find out whether children are better than adults in learning a second language
2. Students are able to understand what basic factors influence learning a second language
3. Students can know that situations can affect learning a second language
4. Students can know that, in learning a second language, is there a critical age

E. Basic Competences

Students can find out how children and adults differ in terms of learning a second-Language.

F. The Subject

1. The common belief: Children are better than adults?
2. Basic Psychological factors affecting in learning L2
3. Social situations affecting L2 learning
4. Critical age for second-language learning

G. Material Description

The Common Belief: Children are better than Adults?

Most people believe that children are better than adults in learning a second language. This seems to be backed up by the common observation that young second-language learners seem to pick up another language quickly, just by exposure and without teaching.

Source: https://images.app.goo.gl/The3zT SEQ
Source:_https://images.app.goo.gl/The3zT * ARABIC 1

Factors involved in second language acquisition can be divided into two categories:

1. Psychological, and
2. Social

1. Psychological

Intelligent processing through analytical determination of grammatical structures and rules by humans. Memory is essential for further language learning. Motor skills are related to the pronunciation of sounds in the second language and the use of the articulatory organs of that language (tongue, lips, mouth, vocal cords, etc.). We will also look at the role of motivations and attitudes in second language learning.

2. Social

The types of situations, attitudes, and interactions a person experiences can affect their learning of a second language. The social situation consists of the natural situation and the class situation. Determining whether children or adults are better at learning a second language is complicated.

Despite some concerns about the classroom environment, it supports the widely held belief that children are better than adults. In other words, adults are not the best in every situation. Toddlers have been found to perform better than adults in

natural language learning environments, and the same is true for older children. It is not uncommon for young children to learn a second language within a year. That is why children do better than adults. In the classroom, older children perform better than adults. However, because kindergarten classrooms do not replicate natural conditions, young people perform better than toddlers. Small children can simulate better.

Psychological Basics Factors Affects in Learning Second-Language Learning

1. **Intelectual Processing: Explication and Induction**

    In learning second language basically, there are two process that affecting in second-language. The first process is explication, where is someone can explain the rules for you. The second is induction process, in this process you does not need someone to explain the rules, but you can figure them out for yourself.

    a. **Explication**: Explanation is the process of explaining the rules and structures of a second language to students. Instructions are provided to help learners understand, learn, and apply the rules (Satriani, 2021).

b. **Induction**: Learning a language through self-discovery or vice versa means that **the** child can hear and remember the language. This means that we can also analyze and discover generalizations within the language (Lestari, Fatimah, Sudarwati, & Astuti, 2021).

However, because explication helps students understand basic sentence structures, it is thought to hasten language development. In contrast, induction focuses more on comprehending complex structures. The program is highly helpful for students who are still at the stage of comprehending subjects and predicates in structured sentences with the use of time or place adverbs at the beginning of the sentence (Arifin, 2020).

2. **Memory**
    a. **Vocabulary Learning and Rote Memory**

It is impossible to imagine for a moment how a person with severe memory impairment can acquire his own language. It takes memory to memorize the simplest words. For example, to learn the word "dog," you need to remember the relationship

*Source: https://images.app.goo.gl/Dgb Xjb SEQ Source:_https://images.app.goo .gl/DgbXjb \ * ARABIC 1*

between hearing that word and seeing, touching, and smelling a dog. Establishing such a relationship between sounds and objects is optional. The meaning of "dog" and the sound of "dog" are illogically irrelevant.

b. Syntax and Episodic Memory

The success of a lesson in learning a second language is because, the learner understands a syntax in the target language. According to Tulving(1972) there are two types of declarative memory, namely, episodic memory and semantics memory. But, in this case we are focusing on episodic memory itself. Episodic memory is refers to persons's own experiences or memories where in this memory is contain with specific contextual features in give the information about "when, where, adn what" (Lane & Houston, 2021). For a further explanation of this explanation, please see the video link beside: *https://youtu.be/EMJUh3vd8vI*

Source: https://images.app.goo.gl/Nswu Ci SEQ
Source:_https://images.app.goo. gl/NswuCi * ARABIC 1

What is the benefits of episodic memory?

The benefits of episodic memory in general is recalling the memories in the past and make up the personal history. Meanwhile, according to research has shown more detailed the benefits of episodic memory that is the ability these events is linked to improved creative thinking, active coping, and psychological wellbeing in general.

c. Children's Memory Ability

In fact, children have very good memories, especially those under the age of seven. What about older children? As some may remember, this does not apply to younger children as there is some decline from around age 8 and a greater decline from around age 12. When it comes

to learning a second language, the difference between children and adults is probably in the way they understand the target language. Adults are already able to analyze second language syntax and become better at it, but children learning a second language use their memory more in their learning. However, another interpretation is that children who are able to analyze syntax faster are quicker to pick up on mistakes in learning the language. The age group of children is her under 7 and he's 2 he's 7 to 12 years old.

3. **Motor Skills**

Motor capacity is a term used by psychologists to describe the use of muscles in performing certain common skills such as walking, writing, and speaking. The motor skills involved in speaking use what linguists call the articulatory organs of language. These include the mouth, lips, tongue, vocal cords, etc., which are generally controlled by muscles controlled by the brain. To reproduce speech accurately, the articulators must perform the right actions at the right time, such as opening the mouth a certain way, or positioning the lips and tongue a certain way. Do you have limited mobility?

a. Decreased general exercise capacity

Around the age of 12, general changes occur throughout the body, affecting all motor skills. Most people experience decline. The reason for the loss of fine control over body muscles is still unknown, but is generally due to changes in central brain function. Pre-pubertal hormonal changes may play a role, but that's just speculation.

b. Deline in ability for new articylations

As we age and our ability to acquire new motor skills declines, our ability to acquire articulatory organs is compromised. Children can be expected to perform much better than adults in second language pronunciation because they have motor flexibility that adults generally

lack. The sooner you start learning a second language, the more native your accent will be.

The video link is an example of how children's ability to remember: *https://youtu.be/fHnmmb9aaFM*

What is the Social Situation Affecting in learning L2

According to Steinberg (2001), social situations can basically be divided into two important categories. These are natural situations, classroom situations. A natural setting is learning a second language in a setting similar to that in which a first language is learned, such as family, play, or work. On the other hand, the class situation also affects the social situation in the school classroom.

a. **Natural situations**: Steinberg (2001) states that children can acquire a second language faster than adults in natural situations. However, it is unclear whether the reason adults do not outperform children is due to factors that impair memory and motor skills.

b. **The classroom situation**

These classroom situations can have a significant impact on second language learning. There are three reasons why classroom conditions affect second language learning. The first is that there is a space that is isolated from social life. There is a teacher and some students in the room. Secondly, everything is

Source: https://images.app.goo.gl/VTawdh SEQ
*Source:_https://images.app.goo.gl/ VTawdh \ * ARABIC 1*

planned and very little is spontaneous. Languages are experienced by students and activities are carried out and planned by teachers. There are levels of planning that are

more or less focused on language, literacy, spontaneity, etc., but the latter means system learning is part of the group rather than the individual.

Some other Influences in Second-Language Learning
a. Motivation

Motivation is an important factor in learning a second language. It refers to the willingness and desire to learn a new language. Motivation can be intrinsic (internal) or extrinsic (external). Intrinsic motivation comes from within the learner, such as a personal interest in a language or a desire to communicate with others. Extrinsic motivation comes from external factors such as rewards or pressure from others to learn a language. Motivation can influence a learner's attitudes and behavior towards learning a second language. Motivated learners are active in language-learning activities, are persistent in their efforts, and take risks when using the language. Motivation also affects the quality of learning and language proficiency.

Teachers and educators can play an important role in promoting the motivation of second language learners. We create a positive and supportive learning environment, provide engaging and relevant materials, and give learners the opportunity to use the language in meaningful ways. You can also provide learners with feedback and encouragement to build their confidence and improve their skills.

Overall, motivation is an important factor in second language learning, and motivated learners are more likely to succeed in language learning.

b. Attitude

Attitude is an important factor in learning a second language. It refers to learners' feelings and beliefs about language and the learning process. Attitudes can be positive or negative and can have a significant impact on

a learner's motivation, commitment and success in language learning.

A positive attitude towards learning a second language increases motivation, perseverance and willingness to take risks when using the language. It can also bring joy and satisfaction to the learning process and increase motivation. On the other hand, a negative attitude can lead to apathy, lack of initiative and low motivation to learn the language.

Attitudes can be influenced by many factors, including personal experience, cultural background, and social attitudes towards the language and its speakers. Teachers and educators are committed to developing a second language by creating positive and supportive learning environments, providing engaging and relevant materials, and providing learners with opportunities to use the language in meaningful ways. It helps shape learners' attitudes towards learning.

In addition, learners develop positive attitudes toward learning a second language by setting realistic goals, focusing on their strengths, and exploring opportunities to use the language outside the classroom can be attached to

Overall, attitude is an important factor when learning a second language, and learners who approach the learning process with a positive attitude are more likely to achieve their language learning goals.

The Situations Affecting Second Language Learning

Acquiring a second language has many social contexts. Steinberg (2001) states that social situations are fundamentally divided into two important categories. These are natural situations, classroom situations. A natural setting is learning a second language in a similar setting to learning a first language, such as family, play, or

work. On the other hand, the class situation also affects the social situation in the school classroom. a.. natural circumstances

1) Features similar to those used for learning native languages. Language is experienced in relation to objects, situations and events in everyday life

2) Language becomes more important in social interactions as we age. In adults, social interaction is primarily through language. For young children, language is less important for social interaction. Older children may have problems. -Older children may seek to maintain their own identity and cultural beliefs by avoiding situations in which they are exposed to language and cultural use that may undermine their self-image.

3) In summary, exposure to language in the natural environment decreases with age.

c. **Guidance Status**
1) The classroom is isolated from the rest of social life. This is a planned situation. In the classroom, people learn languages as part of a group rather than as individuals.

2) In general, learning in the classroom improves with age, as older children and adults are more adaptable to lesson plans and more receptive to what is conveyed through explanations. C). Who is better? Child or adult?

3) in natural situations. Natural situations are more favorable to children, as adults generally experience a marked decline in the quality and quantity of social interactions that lead to good language learning. in a classroom setting.

4) In a classroom environment, adults not only explain better than toddlers, but simply because they know how to be a student.

d. **Comparing the context of the ESL or EFL community to children and adults**, we can say that the ESL context benefits children more than adults, assuming that natural conditions benefit children more than adults. Of course, the ESL context benefits adults too, but to a lesser extent. Conversely, in the context of EFL, adults may achieve better outcomes if they are able to apply their superior cognitive skills to learning in a classroom setting.

Critical Age For Second-Language Learning

1) Adults can learn a second-language

When it comes to adult second language acquisition, there is a common observation that a great many adults actually learn the syntax of other languages flawlessly. Some people are so good with a second language that they are considered native speakers based solely on their grammar (not their pronunciation, which we'll talk about later).

2) No demonstrated critical age for learning syntax

However, there is research that shows that the age at which syntax acquisition begins has a different effect. Patkowski (1980) had native English speakers assess the syntax of spontaneous speech recordings by immigrants who arrived in the United States around the age of 15.

Critical Age of Pronunciation

Mack (1986) and Perani et al. (2003) found that experimental tasks revealed differences in both grammar and pronunciation, even though highly skilled second-language speakers appeared to be functioning at the native-language level. claims to be revealed. European-born US Secretary of State Henry Kissinger (President Nixon) and Zbigniew Brzezinski (President Carter). Current neurological research in visually impaired people suggests that the human brain remains flexible throughout life and can adapt to language problems in older

adults. Therefore, while I agree with Scobel that there is no critical age for syntax when acquiring a second language, I disagree that there is an absolute critical age for pronunciation. Some adults are very good at pronouncing their native language.

Activities
1. Students are expected to read the material that has been provided to deepen their understanding of this material.
2. After reading the material provided, students are expected to be able to understand what the matrix contains.
3. Students can conduct discussion sessions with teachers or friends regarding the material provided.
4. Students can conclude the results of their discussions in front of the class

Discussion material

In the material it has been explained how children and adults learn a second language, discuss it and then present it together with your friends regarding your perceptions, is it true that in learning a second language adults are slower? If you agree, explain the reasons based on data from the internet or from experience around you.

H. Conclusion

Finally, the material on second language acquisition in children and adults highlights the differences and influencing factors in the second language acquisition process of children and adults. Various surveys and studies have shown that children and adults experience different benefits and challenges when learning a second language.

Children have a natural ability to pick up new sounds, imitate speech patterns and acquire vocabulary quickly. They often exhibit resilience, fearlessness, and a willingness to experiment with new languages. The development of cognitive skills and lack of self-confidence allow for more flexible language

learning. Adults, on the other hand, bring their developed cognitive skills, prior language learning experience, and deep understanding of language structure to the second language acquisition process. They are able to apply effective learning strategies, impart knowledge from their native language and set specific learning goals.

However, social and emotional factors also play a role. Children are often more socially open and less inhibited in language production, while adults can be anxious and afraid of making mistakes. These emotional factors can influence motivation, confidence, and ultimately language learning outcomes. Understanding these differences in second language acquisition between children and adults is critical for educators and language teachers. This enables the development of customized educational approaches, methods and materials according to the specific needs and characteristics of each age group. By recognizing the strengths and challenges of children and adults, educators can create supportive learning environments that foster language development and encourage optimal second language acquisition.

Further research in this area is essential to examine the specific mechanisms and strategies that can enhance second language learning in both children and adults. A thorough understanding of these factors will enable educators to further improve teaching practices and maximize language learning outcomes for learners of all ages.

REFERENCES

Arifin, W. L. (2020). The Difference of Second/ Foreign Language Acquisition and Learning for Adults and Children (A qualitative study on Steinberg's research (1982 and 1993). *Journal of Englsih Teaching and Learning Issues*, 103.

Dabrowska, E., Becker, L., & Miorelli, L. (2020). Is Adult Second Language Acuquisition Defective? *frontiers in Psychology*, 2-11.

Hartshorne, K. J., Tenenbaum, B. J., & Pinker , S. (2018). A critical period for second language acquisition: Evidence from 2/3 million English speakers. *ScienceDirect*, 264-275.

Heil, J., & Lopez , L. (2019). Acquisition without evidence: English infinitives and poverty of stimulus in adult second language acqustion . *Sage*, 416-440.

Lane, S. M., & Houston, K. A. (2021). *Understanding Eyewitness Memory.* New York: NYU Press.

Lestari, I. P., Fatimah, Sudarwati, E., & Astuti, Y. (2021). *Teaching english as a foreign language(TEFL) in Indonesia context: A practical guide.* Malang: UB Press.

Rice, C. A., & Tokowicz, N. (2020). A review of laboratory studies of adult second language vocabulary training . *CAMBRIDGE UNIVERSITY PRESS*, 440-465.

Sarrett, M. E., Shea, C., & McMurray, B. (2021). Within- and between- language competition in adult second language learners: implications for language proficiency . *Routledge Taylor & Francis Group*, 167-178.

Satriani. (2021). *Psycholinguistic.* Pekalongan: Nasya Expanding Management.

Suryantari, H. (2018). Children and Adults in Second-Language Learning. *Teaching of English Language and Literature Journal* , 31-35.

Wallden, & Robert. (2020). Interconnected literacy practices. Exploring classroom work with literature in adult second language education . *European journal for Research on the Education and Learning of Adults* , 45-51.

UNIT 7

SECOND-LANGUAGE TEACHING METHODS

Introduction

Welcome to the second-language teaching methods! Learning a second language is a transformative and fulfilling experience that introduces you to new cultures, opportunities, and connections. It is critical for language educators to investigate effective teaching approaches that enable learners to develop their language abilities and attain proficiency.

This chapter describes some of the methods that fall within the scope of second language teaching methods. In second language teaching, there are several methods that can be used by teachers to determine how a lesson will be taught to students. Readers are expected to easily understand and understand some of the methods that have been listed in this chapter which are presented with a concise explanation. These methods will also later be applied by the reader who will later become a teacher or teacher who is looking for the right method to determine how he will transfer the knowledge of the language of both. Not only that, the author will be very grateful if this chapter can be a way that can be used by a teacher to add his insight in second language teaching methods.

By the end of this chapter, you will have a thorough understanding of numerous second-language teaching approaches, as well as their theoretical underpinnings and practical applications. You will be given the knowledge and resources you need to create and conduct successful language education that promotes learners' linguistic growth and cultural competence. Let us engage on this

scientific investigation of second-language teaching approaches in order to enrich our pedagogical understanding and improve our instructional practices.

A. Study Activities

What is Second-Language Teaching Methods?

Second-LANGUAGE Teaching techniques refer to the many approaches and strategies used to teach a language to novices learning it as a second language. The goal of these tactics is to help students improve their listening, speaking, reading, and writing skills in the target language. Here's an explanation of 2d-language coaching methodologies, as well as a research resource. Second language learning (SLL) is the process and study of how people learn a second language in addition to their original language, often known as a target language or L2. The term "second language" in this context refers to any language learnt in addition to the original tongue (including a third or fourth language). Bilingual learning, in which a kid learns two languages at the same time (for example, when both parents speak different languages), is distinguished from second language learning. Second language learning occurs only after the first language has been learnt.

The area of language education has a long history of theories, methodologies, and studies that seek the best teaching methods and procedures to meet the requirements of language

learners and help them achieve their goals. Language teaching is a two-way process in which both teachers and learners seek the best ways to achieve the expected targets. This descriptive study aims to pinpoint the most popular methods for teaching SL (second language). It makes an effort to explain the fundamental ideas behind the most popular teaching strategies and how they affect instructional methods.

1. **Characterizing the Essentials of Methods.**

   "Characterizing the necessities of techniques" refers back to the method of identifying and describing the fundamental components and capabilities of language coaching techniques. This involves inspecting the underlying ideas, strategies, and techniques employed in various strategies to better understand their precise characteristics and effectiveness in language getting to know. here is evidence of "Characterizing the necessities of methods" in English, together with a reference for further exploration:

   Will characterize the necessities of methods in language coaching, researchers and educators examine distinct strategies and techniques hired in language classrooms. They take a look at the theoretical foundations, and educational techniques, and get to know outcomes associated with each approach. They want to provide thorough insight on how exclusive tactics promote language acquisition and scalability by determining the core components and standards. Diane Larsen-Freeman argues that the crucial characterization of language teaching methods involves information on how they facilitate language comprehension, manufacturing, and interplay in mastering contexts.

Language Focus : Literature VS Speech Communication

Methods are divided into two categories: those that teach language through the target language's speech and those that teach language through reading and writing. With the exception of Grammar-Translation, which focuses on reading, writing, and interpreting written materials, most other systems place an emphasis on vocabulary and speech in communication.

2. **Traditional Methods : Grammar-Translation, Natural Approach, Direct Approach, Audiolingual Approach**

Traditional strategies, which include the grammar-translation technique, natural method, direct technique, and audiolingual approach, were broadly utilized in language coaching. right here is an explanation of each approach in English, in conjunction with a reference for similar exploration:

a. Grammar-Translation approach:

The grammar-translation method is a conventional method that makes a specialty of coaching grammar guidelines and vocabulary via translation exercises. The emphasis is on studying and writing competencies, with little interest given to speaking and listening. Inexperienced people routinely observe and evaluate grammatical systems, as well as translate sentences from one language to another. This strategy was modeled after how classical languages like Latin were taught. The

primary focus was on the teacher, and the major goals were to acquire lists of vocabulary words and grammar rules. Since the conversational component was not seen as being vital, this strategy concentrated on improving reading and writing abilities. This method is the most classical and aims to read the literature of SL. In addition, it was hoped that, through the study of target language grammar, students become more familiar with their native language grammar.

The Grammar-Translation Method is a strategy for teaching a second or foreign language that emphasizes grammar study and translation as the primary teaching and learning activities. It involves both ; (1) utilizing the native language to explicitly explain grammatical rules and (2) employing translation to clarify vocabulary and structural meanings. The student's and teacher's tasks are to the primary educational activity being the translation of a literary passage. Exercise in reading comprehension Grammar practice and vocabulary exercises.

In this instance, the first language is kept as the second language's primary reference system. Students can better understand the meaning of a sentence by comparing the two languages.

GOALS:
To be able to read works of literature in the target language
The capacity to translate between different languages.
To improve writing and reading abilities The goal of this strategy is to read literature in the target language while simultaneously studying reading and writing.

b. Natural approach:

The Natural Approach (this method emphasizes the parallels between first- and second-language acquisition. There are no errors. It is through exposure to language that is understandable to the students--or via its facilitation--that learning occurs. The natural approach, created by Tracy Terrell and backed by Stephen Krashen 1983, is a method of teaching languages that maintains that learning a language is similar to how people spontaneously pick up their original tongue. The herbal technique emphasizes the learning of a second language via herbal verbal exchange and contextualized conditions. Its ambition is to copy the herbal language acquisition process by exposing rookies to meaningful enter and inspiring them to apply the language in real-life contexts. The emphasis is on speech and listening abilities, and grammar is learned instinctively.

c. Direct approach:

The direct technique emphasizes using the target language as the medium of preparation. It avoids translation and encourages direct affiliation between gadgets, movements, and words within the goal language. The interaction of newcomers in oral drills, communication, and position performances broadens their speaking and listening capacities. Grammar is taught inductively thru context and examples. There was a desire to develop language teaching concepts that were similar to those seen in first language acquisition, which ran parallel to the ideas of the Reform Movement. These were referred to as natural techniques before this new technique was given the name Direct Method in the nineteenth and twentieth centuries. Since mother-tongue instruction was not permitted, the Direct Method was based on the instruction given solely in the target language. The terminology was taught via examples. The speaking abilities were divided into sections based on teacher-

student dialogue. By the 1920s, fewer people were using this technique. Despite this decline, applied linguists systematized reform movement-inspired ideas for teaching English as a foreign language by the 1930s. Other techniques followed, such as audiolingual.

The Direct Method involves only teaching in the intended language. The student is not permitted to speak in their tongue. Grammar norms are disregarded, and emphasis is placed on pronunciation. Grammar translation is a key component of language acquisition in both the target and source languages. Long lists of vocabulary are to be learned by heart, and grammar standards are to be memorized). Through teacher questions and student responses that foster a communicative environment and give students a ton of understandable feedback, this method focuses on teaching students how to use a foreign language. Additionally, inductive learning is used to study grammar. By refraining from using their native tongue, this strategy encourages students to think and talk in the target language. Additionally, this approach successfully improves pupils' conversational skills.

d. Audiolingual approach:

After World War II, the ALM method of teaching foreign languages was created, emphasizing the instruction of speaking and listening before reading and writing. Mother tongue is discouraged in the classroom, where it is presented primarily through dialogue and practiced mostly through drills. It was constructed in accordance with the linguistic principles of structuralism, and structuralists hold that grammar and rules are what enable the formation of any language. And behaviorism believed that the mind and thinking were irrelevant for speech production and comprehension and could be learned by repetition, just like bicycle riding. The audio-lingual approach makes a specialty of developing oral

proficiency thru extensive listening and speaking practice. Novices are exposed to dialogues and patterns that they imitate and repeat. Grammar is taught via drilling and memorization, with an emphasis on accurate pronunciation and mastery of language patterns.

You may scan all this QR code for futher explanation and example of activities;

Grammar-Translation	Natural Approach	Direct Approach	Audiolingual Approach

3. **Offbeat Methods : Cognitive Code Method, Community Language Learning(CLL), Silent Way, Suggestopedia**

Offbeat techniques, which include cognitive code, community language getting to know, silent manner, and suggestopedia, have emerged within the field of language teaching. These strategies provide various approaches to language learning and teaching. Here is verification of each technique in English, as well as a reference for further research:

a. Cognitive Code Method

The cognitive code method emphasizes the expertise and use of cognitive strategies in language-gaining knowledge. It makes a spa specialty in the analysis of language structures, the specific teaching of grammar rules, and the software of deductive reasoning. It is recommended that beginners use their cognitive abilities to assimilate language patterns and broaden their linguistic proficiency.

b. Community Language Learning

Network language learning is a learner-centered method that emphasizes the significance of constructing a supportive and collaborative getting-to-know network. The trainer acts as a counselor or facilitator, guiding inexperienced persons through significant interactions and addressing their emotional and mental needs. The emphasis is on increasing verbal communication skills and creating a terrific getting-to-know-you environment.

c. Silent way

A silent manner is an unconventional approach that encourages learner autonomy and energetic trouble-solving. The teacher takes a passive role and provides minimum verbal entry, allowing novices to discover language guidelines and patterns via self-correction and experimentation. The emphasis in language mastery is on developing beginners' independence and analytical skills.

d. Suggestopedia

Suggestopedia is a way that carries song, rest, and high-quality notions to create secure and conducive mastering surroundings. novices are exposed to rich linguistic materials, inclusive of dialogues, songs, and texts, with the purpose of activating their subconscious gaining knowledge of capacities. The method emphasizes the importance of a high-quality attitude and a secure kingdom for effective language acquisition.

4. **Contemporary methods: Total Physical Response, Communicative Language Learning Teaching, Natural Approach, Contents-Based Instruction, Task-Based Language Teaching, Computer-Assisted Language Learning**

Modern approaches in language teaching have gained popularity, including total physical response (TPR), communicative language teaching (CLT), natural method, content-based instruction (CBI), task-based language

teaching (TBLT), and computer-assisted linguistic learning (call). These approaches to language training are more current. Here is an English explanation of each approach, as well as a resource for more research:

a. Total Physical Respon (TPR)

The use of physical movement and movements to assist language learning is emphasized in general body reaction instruction. Beginners respond to the instructor's directions by physically performing the moves, allowing a strong connection between language and movement to be established. TPR is particularly powerful for novices and young freshmen. Asher, J. J. (2000). Learning Another Language Through Actions. Sky Oaks Productions.

b. Communicative Language Teaching (CLT)

Communicative Language teaching specializes in growing novices' communicative competence via meaningful and actual language use. The technique encourages rookies to interaction in actual lifestyles communicative responsibilities, consisting of discussions, role-performs, and problem-solving activities. CLT emphasizes the practical use of language in various contexts.

c. Natural Approach

The herbal method is primarily based on the notion that language acquisition takes place through exposure to comprehensible enter and significant interplay. The method emphasizes the importance of making a low-anxiety studying surroundings, in which rookies can gather language in a natural, non-threatening manner Instead of explicit grammatical instruction, the emphasis is on knowledge and conversation.

d. Content-Based Instruction (CBI)

Language learning is combined with the study of difficulty count in content-primarily based advice. Freshmen develop language skills while also being exposed to curriculum from several educational areas. CBI

promotes the improvement of both language proficiency and content understanding, making it suitable for academic or specific function contexts.

e. Task-Based Language Teaching (TBLT)

Undertaking-primarily based Language coaching emphasizes the use of proper, actual-lifestyles responsibilities because of the imperative unit of preparation. Beginners have major responsibilities that demand them to use the target language to achieve a communication goal. TBLT promotes the combination of language talents and encourages learners' autonomy and problem-solving abilities.

f. Computer-Assisted Language Learning (CALL)

Computer-Assisted Language learning refers to using technology, which includes computer systems and digital assets, to enhance language getting to know. Name can refer to a variety of activities, such as interactive athletic events, internet communication platforms, and multimedia products, which provide beginners with additional opportunities for language practice and self-directed learning.

5. **The Goals Must Be Considered When Selecting a Teaching Approach.**

While choosing a teaching technique, it is essential to make goals into attention. Desires have a significant part in determining the best teaching strategy to use. Each coaching technique has its own strengths and weaknesses, and sure methods can be higher acceptable for precise learning goals. by using aligning the goals with the selected coaching approach, educators can optimize the getting to know enjoy and enhance scholar success

H. Douglas Brown, an expert in the area of language teaching, emphasizes that gaining knowledge of goals ought to be the principal issue in deciding on teaching methods. According to him, using tactics that are appropriate for the

learning objectives will allow the educator to promote the achievement of the intended outcomes.

B. Summary

Second-language teaching methods are instructional approaches and strategies used to help persons who already know another language learn a new language. These strategies are intended to improve language acquisition and communicative competence in the target language. We will look at some common second-language teaching approaches, their key ideas, and their success in language learning in this summary.

The Grammar-Translation Method is a conventional approach that stresses explicit grammar rule teaching and translation between the target and native languages. It emphasizes reading and writing abilities while ignoring oral communication. Because of its poor effectiveness in creating real-world language proficiency, this strategy has gone out of favor.

The Direct Method, also known as the Natural Method, emphasizes immersive language learning. It discourages the use of the native language and encourages students to learn through direct exposure to the target language in meaningful contexts. Oral communication and listening skills are prioritized, and grammar is taught inductively rather than explicitly. This method promotes a communicative and contextual understanding of the language.

The Audio-Lingual Method, popular in the mid-20th century, focuses on repetitive drills and pattern practices. It emphasizes the development of listening and speaking skills through constant oral practice. Grammar is taught implicitly, and language patterns are memorized through repetition. This method aims to develop automaticity and habit formation in language use. Communicative Language Teaching (CLT) is a learner-centered approach that emphasizes meaningful communication in the target language. It promotes interaction, negotiation of meaning, and the use of authentic language in

real-life contexts. CLT encourages learners to develop their communicative competence through task-based activities, role-plays, and group work. It integrates the four language skills (listening, speaking, reading, and writing) and focuses on fluency rather than accuracy. Content-Based Instruction (CBI) integrates language learning with subject matter content. It uses academic or vocational content as the basis for language instruction. CBI aims to develop both language proficiency and knowledge in a particular field. It provides learners with authentic and meaningful language use opportunities, enhancing their motivation and engagement.

Second-language teaching methods have evolved over time, moving from grammar-focused approaches to more communicative and context-driven methodologies. While traditional methods like the Grammar-Translation Method and Audio-Lingual Method have limitations in terms of real-life language proficiency, approaches like the Direct Method, Communicative Language Teaching, and Content-Based Instruction have gained popularity for their learner-centered and communicative approaches. Effective language teaching often combines various methods, taking into account learners' needs, goals, and the context of learning to create a rich and meaningful language learning experience.

C. Assesment/Evaluation

The best assessments/evaluations for second-language teaching methods are those that align with the learning outcomes, effectively measure language proficiency, and provide valuable feedback to both learners and instructors. Here are some commonly used and effective assessment methods in second-language teaching:

1. Oral Proficiency Interviews: Conducting one-on-one interviews where learners engage in conversation and demonstrate their speaking skills and fluency.

2. Writing Assessments: Evaluating learners' writing skills through assignments, essays, compositions, or timed writing tasks. Assessments can focus on grammar, vocabulary usage, organization, and overall coherence.

3. Listening Comprehension Assessments: Using audio recordings or videos to assess learners' ability to understand spoken language, extract information, and answer questions related to the listening material.

4. Reading Comprehension Assessments: Providing written texts and assessing learners' understanding by asking comprehension questions, true/false statements, or requiring them to summarize or analyze the text.

5. Communicative Tasks: Assigning tasks that require learners to use the language in real-life or simulated situations, such as role-plays, debates, presentations, or group discussions. Assessments can focus on fluency, accuracy, and the ability to communicate effectively.

6. Self-Assessment and Reflection: Encouraging learners to reflect on their own language learning journey, set goals, and self-assess their strengths and areas for improvement. This can be done through self-evaluation checklists or reflective journals.

REFERENCES

Adebileje, A., & Akinola, A. (2020). Teaching and learning English as a second language in nigeria: Examining evolving approaches and methods. *Theory and Practice in Language Studies*, *10*(9), 1015. https://doi.org/10.17507/tpls.1009.02

ELLIS, N. C. (2019). Essentials of a theory of language cognition. *The Modern Language Journal*, *103*, 39–60. https://doi.org/10.1111/modl.12532

Farrell, T. S. C., & Jacobs, G. M. (2020). *Essentials for successful English language teaching*. Bloomsbury Academic.

Gouda, I. (2022). *Language Teaching Methods and Techniques*, 1–15.

Hummel, K. M. (2021). *Introducing second language acquisition perspectives and practices*. Wiley Blackwell.

Khalil, L., & Kholofelo Semono-Eke, B. (2020). Appropriate teaching methods for general English and English for specific purposes from teachers' Perspectives. *Arab World English Journal*, *11*(1), 253–269. https://doi.org/10.24093/awej/vol11no1.19

Khruawan, P., & Dennis, N. K. (2017). A study of English reading comprehension using content-based instruction approach. *International Journal of Research -GRANTHAALAYAH*, *5*(1), 368–375. https://doi.org/10.29121/granthaalayah.v5.i1.2017.1911

Renau, M. L. R. (2016). *A Review of the Traditional and Current Language Teaching Methods*.

Richards, J. C., & Rodgers, T. S. (2014). Approaches and Methods in Language Teaching (3rd ed.). Cambridge University Press.

UNIT

8

BILINGUALISM, INTELLIGENCE, TRANSFER AND LANGUAGE STRATEGIES

Learning objectives:
1. Understand the concept of bilingualism, including its different forms and modalities, and explore the benefits and challenges associated with being bilingual.
2. Examine the relationship between bilingualism and cognitive abilities.
3. Explore the concept of transfer in language learning.
4. Explore the effective learning strategies for language acquisition.

Introduction

This chapter will elucidate the fundamental concepts of bilingualism and how bilingual proficiency can influence one's intelligence. We will also explore the notion of cognitive transfer between languages, which entails how knowledge and skills acquired in one language can be transferred and applied in another. Additionally, this chapter will offer insights into effective learning strategies for bilingual individuals, encompassing techniques and approaches that can enhance learning abilities in both languages.

Furthermore, this chapter seeks to provide practical guidance for individuals who wish to enhance their bilingual skills and maximize the cognitive advantages associated with bilingualism. By understanding the underlying mechanisms of transfer and the ways in which bilingualism can enhance intelligence, learners will be empowered to make informed decisions regarding their language learning journey.

The importance of studying this chapter cannot be overstated. Bilingualism has the potential to open doors to diverse cultural experiences, global career opportunities, and improved cognitive abilities. Whether you are a language enthusiast, an educator, or a parent seeking to support your child's language development, this chapter will equip you with valuable insights and strategies to navigate the complexities of bilingualism.

As we embark on this enriching learning journey, let us express our sincere gratitude to the individuals and researchers who have contributed to the vast body of knowledge in this field. May this chapter serve as a stepping stone towards a deeper appreciation of bilingualism, intelligence, transfer, and effective learning strategies. Let us embrace the joy of language acquisition and celebrate the remarkable cognitive benefits that bilingualism can bring.


Bilingualism enhances intelligence and promotes cognitive transfer, leading to improved learning strategies. The ability to switch between languages strengthens mental flexibility and problem-solving skills. Bilingual individuals often employ effective learning strategies such as code switching, mnemonic techniques, and language practice, enabling them to leverage their linguistic repertoire for enhanced learning outcomes.

Before delving deeper into the core content, we would like you to watch a video titled " "The benefits of the bilingual brain" :

EXPLORE AND REFLECT
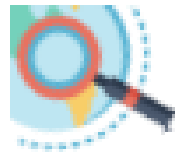
After watching, take some time to reflect and answer the following reflection questions:

Scan Here

1. What are the main advantages and benefits of being bilingual discussed in the video?
2. Have you personally encountered bilingual individuals or communities in your life? How have you observed or experienced the advantages of bilingualism?
3. How does bilingualism enhance cognitive functions, such as attention, problem-solving, or multitasking skills? Can you provide real-life examples or personal experiences that support this notion?
4. Reflecting on the sociocultural aspects, how does bilingualism facilitate cross-cultural communication, enhance cultural understanding, or foster a sense of cultural identity?

A. Varieties of Bilingualism

The capacity to use and understand two languages is referred to as bilingualism. While the standard definition of bilingualism frequently focuses on people who can speak and understand two spoken languages, there are several additional kinds and modalities of bilingualism that should be considered.

Bilingualism encompasses various forms and modalities of language proficiency. It extends beyond the ability to speak and understand two spoken languages. For instance, individuals fluent in a sign language and a spoken language are considered bilingual. Deaf individuals, who can communicate effectively in both sign language and spoken language, exemplify this type of bilingualism. Additionally, there are bilinguals who possess strong reading and writing skills in a second language but lack

fluency in speaking. These individuals often acquire the language through written contexts.

Another type of bilingualism is sequential bilingualism, which happens when a person learns a second language after becoming proficient in their first (Bialystok, 2017). This frequently occurs when a person relocates to a new nation or is exposed to a different linguistic environment. A person who immigrates to an English-speaking nation and learns English as a second language while preserving their original language is an example.

Bilingualism can manifest at varying degrees of proficiency, with some individuals being balanced bilinguals and others demonstrating dominance in one language. Code switching and code-mixing are common phenomena in bilinguals, where individuals alternate between languages or incorporate elements from different languages in their speech. It is important to acknowledge that bilingualism encompasses sign languages and written languages alongside spoken languages, reflecting the diverse ways in which languages are learned and used across different modalities.

B. Is Bilingualism Beneficial or Detrimental?

Bilingualism is often viewed as advantageous for individuals and societies, promoting cooperation, understanding, and effective communication across diverse cultures (Steinberg & Sciarini, 2006). It offers personal benefits such as the ability to travel, appreciate different cultures, and actively participate in global experiences. In countries with multiple dominant or official languages, bilingualism plays a crucial role in fostering inclusivity and ensuring effective communication within the community, as seen in Switzerland and Canada (Kużelewska, 2016).

However, concerns have been raised, particularly regarding early second language acquisition in young children. Some argue that it may negatively impact native language development and cognitive abilities, including mathematics and

reading (Pan, 2023; Sun, 2022). Historical restrictions on foreign language teaching in certain US states following World War I were driven by fears about potential cultural value erosion in children (Steinberg & Sciarini, 2006).

It is important to note that these concerns emerged during a time of limited understanding and isolationist perspectives. Over time, attitudes toward bilingualism have evolved positively, with recognition of its academic and cultural benefits (Steinberg & Sciarini, 2006). Contemporary scientific research has debunked earlier concerns, demonstrating cognitive advantages such as stronger executive functions, problem solving skills, and cognitive flexibility in bilingual individuals (Grundy, 2020). Bilingualism is associated with heightened cultural awareness, adaptability, and a broader worldview.

Did you know that bilingualism can have a positive impact on the brain's structure and function? Research has shown that bilingual individuals have increased gray matter density in certain brain regions, particularly those related to language processing, attention, and cognitive control. These structural differences are believed to be a result of the constant exercise and cognitive challenges posed by managing two languages. So, being bilingual not only enhances communication skills but also provides unique neurological benefits!

C. Effects of Early Bilingualism on First-Language Development and Intelligence

The effects of early bilingualism on first-language development and IQ have been extensively studied and debated. Early research, such as Smith's work in the 1930s, initially suggested that bilingualism could hinder language development and lead to errors in the native language. However, these early findings had limitations and biases, often comparing non-standard languages to standard language usage.

More recent and comprehensive research, exemplified by studies conducted by Lambert and colleagues in Canada, has provided a deeper understanding of the impacts of bilingualism.

For instance, Bruck et al. (1976) found that English-speaking children in a French immersion program achieved nearly as proficient second-language skills as native French-speaking children, without any detrimental effects on their English language development. In fact, the immersion group even outperformed the control group in creativity, mathematics, and science.

While some evidence suggests that bilingual children may not attain native-level proficiency in certain aspects of language competence, this may be attributed to limited exposure to native speakers. Prolonged interaction with native speakers is crucial for acquiring native-like competency. Furthermore, the positive effects of bilingualism extend beyond closely related language pairs. Studies examining bilingualism in linguistically diverse languages, such as English and Japanese, have demonstrated promising outcomes. For instance, Bostwick (1999) compared Japanese students in an English immersion program to a control group studying Japanese. The immersion students achieved success in learning English while maintaining equivalent proficiency in their native language and academic achievements.

Regarding IQ, early research often suggested that bilingualism had a detrimental impact. However, these conclusions were influenced by cultural biases and flawed methodologies. As researchers recognized the limitations of language-based IQ testing and cultural bias, they discovered that bilingualism actually has a beneficial influence on intellect. Peal and Lambert (1962) found that bilingualism enhances mental flexibility and abstract thinking. Recent research, such as the work of Bialystok, has further demonstrated that multilingual individuals exhibit stronger cognitive abilities, including improved attention, problem-solving skills, and fluid intelligence.

D. Sequential Learning of Two Languages

Sequential bilingualism is the process of acquiring a second language after the first language, usually when the native language differs from the dominant language in the community or school system. The timing for sequential bilingualism varies, but typically it applies when the second language is introduced around the age of three.

According to Tabors and Snow (1994), young children progress through four stages in sequential bilingualism.

E. Strategies for Second-Language Production

1. The First-Language Strategy and the Second-Language Strategy

In language learning, two key strategies employed by learners are the first-language strategy and the second-language strategy (Steinberg & Sciarini, 2006). The first-language strategy involves drawing upon knowledge and skills from the learner's native language (L1) while acquiring a second language (L2). Learners rely on their L1 to comprehend and communicate in the L2, transferring linguistic knowledge and structures from their L1 to the L2. However, excessive reliance on the first-language strategy may lead to interference and errors in the L2. Conversely, the second-language strategy focuses on specific techniques and approaches that learners use to enhance their proficiency in the target language. This includes mnemonic techniques, vocabulary expansion, language practice, immersive experiences, and engaging with authentic language resources. Striking a balance between these strategies, while emphasizing the development of L2-specific skills, is crucial for effective language learning, enabling learners to leverage their existing knowledge while actively acquiring the second language.

2. Strategies for Sentence Production and Communication

Strategies for sentence production and communication involve various techniques aimed at maintaining dialogue and facilitating language learning. These strategies, as discussed by Faerch and Kasper (1983) and Kasper and Kellerman (1997), play a crucial role in language acquisition by increasing the learner's exposure to linguistic input. By actively engaging in communication, learners have more opportunities to acquire the language. However, it is important to note that overgeneralization can occur, where learners apply a rule of the second language in inappropriate contexts, as seen in the example of using the definite article with 'dinner'. Communication strategies may also involve code-switching, using words or phrases from the first language when unfamiliar in the second, or even creating new terminology, as demonstrated by the use of 'airball' for 'balloon' (Varadi, 1983).

3. Strategies for Becoming a Better Second-Language Learner

Learning strategies for second language acquisition are distinct from the previous topic discussed, which mainly focused on adopting tactics to enhance communication and dialogue. Another aspect pertains to how individuals can improve their skills in learning a second language. Researchers such as Rubin (1981), Wenden and Rubin (1987), Cohen (1998), O'Malley and Chamot (1990), and Oxford (1990, 1996) have explored this area. Rubin (1981) identifies various strategies employed by successful language learners. These strategies include verification, where learners test their language theories to confirm their accuracy. Additionally, learners engage in inductive processing, drawing upon their knowledge of the first or second language to develop assumptions about the second language. Deductive reasoning is another strategy, where learners apply universal logic to problem-solving. Practice, involving repetition, rehearsal, and limitation, is also crucial. Memorization techniques, such as mnemonic methods and repetitions, aid

in storing and retrieving information. Finally, monitoring plays a vital role, as learners are aware of their errors and pay attention to how their message is perceived by the audience. While these strategies may appear natural for any language learner, research indicates that deliberate training in these methods improves learners' abilities (Cohen, 1998).

F. Teaching Reading in a Bilingual Situation at Home

When teaching a child to read in two languages, the One Person-One Language (1P-1L) method is recommended. Each parent consistently speaks one language to the child, allowing them to learn both languages simultaneously as speech (Steinberg & Sciarini, 2006). However, when it comes to teaching reading, it is advisable to introduce the second language sequentially after a year or two. Initially, the focus should be on teaching reading in the first language, with one parent actively involved. Once the child has mastered reading in the first language, the second language can be introduced, with the parent who speaks that language taking on the primary teaching role. Simultaneous reading instruction in both languages is discouraged due to the potential confusion and additional burden on parents. It is more practical to introduce the second language reading separately to avoid over whelming the child with different writing systems and materials. It is recommended to teach the child to read in the language that is most essential for their daily life, such as the community language or the language used in school. This enables the child to read signs and reinforce their learning at home. Attaining a strong reading ability in the first language before starting school provides a solid foundation for handling reading materials in the educational setting. Teaching the second language to read becomes easier as the child has already grasped the fundamental concepts of reading from their first language instruction.

Read the clues in the next page carefully and complete the crossword puzzle by filling in the boxes with the corresponding answer!

Clues

Take a look at the six bilinguals presented below. Do you recognize them?

For this assignment, you will be creating a bilingual personalities poster, each group must select three individuals they find interesting or inspiring, Explore their.

Sara is a bilingual student. She learn Englisht school and Spanish at home. To improve her reading skillls in both language, her parents implement the 1P-1L method. Sara's mother teaches her to read in Spanish, while her father guides her in English reading.

1. How does the 1P -1L method benefit Sara's bilingual learning journey in terms of reading skills development?
2. What are the potential challenges or limitations of implementating the 1P -1L method in teaching Sara to read in both language?
3. Can you suggest an alternative strategy that Sara's parents could use to further enhance her reading profiency in both language?

Haley recently moved to a new country and needs to learn a new language, French. To enhance her language skills, Haley uses the second-language strategy by practicing vocabulary and listening to French songs. She also participates in language exchange programs to interact with native speakers and practice French in real-life situations.

1. How do practicing vocabulary and listening to French songs contribute to Haley's language-learning process?
2. Discuss potential challenges that Haley might face in learning a new language and how he can overcome them.
3. Explain the benefits of participating in language exchange programs for improving language skills.

Albedo is a student learning Japanese. He utilizes memory strategies to remember new vocabulary and phrases. He employs repetition by practicing the words and phrases frequently. Albedo also uses mnemonic techniques such as associating words with pictures or creating sentences containing the words.

1. Analyze the effectiveness of repetition as a memory strategy for Albedo's learning of Japanese vocabulary and phrases.
2. How does repetition contribute to Emma's ability to remember and apply the learned words and phrases?
3. How can mnemonic techniques aid Albedo in remembering and applying the newly learned words and phrases in his Japanese studies.

This quizizz will be test your knowledge and comprehension of Bilingualism, Intelligence, Transfer, and Learning Stategies. It will serve as a starting point for our exploration and analysis of bilingual individuals and their impact on life. Get ready to challange yourself.

SCAN HERE

Or

https://quizizz.com/join/quiz/648bb8cb201af0001d5da6fc/start? studentS hare=true

G. Conclusion

Throughout this chapter, we have explored the captivating realm of bilingualism and the numerous benefits it offers. From cognitive advantages to social and occupational opportunities, we have gained insights into the power of mastering multiple languages. By understanding bilingualism's cultural dimensions and its impact on cognitive abilities, students are equipped to embrace intercultural understanding and enhance their problem-solving and memory skills.

This chapter has provided a comprehensive understanding of bilingualism, empowering students to become independent learners and adopt effective learning strategies. Bilingualism opens doors to diverse cultural experiences, career prospects, and flexible thinking. We encourage you to further explore additional materials to deepen your knowledge of bilingualism. May this chapter ignite a lifelong passion for language exploration and personal growth.

REFERENCES

Bialystok, E. (2017). *Types of bilingualism and their influence on language processing*. Applied Linguistics, 38(3), 319-324.

Bostwick, M. (1999) *A Study of an Elementary English Language Immersion School in Japan*. Unpublished doctoral dissertation, Temple University, Philadelphia.

Bruck, M., Lambert, W., & Tucker, G. (1976). *Cognitive and attitudinal consequences of bilingual schooling*: The St Lambert project through grade six. International Journal of Psycholinguistics, 6, 13–33.

Cummins, J. (1979). *Subtractive bilingualism: Linguistic disadvantages and consequences*. Canadian Journal of Education, 4(3), 373-383.

Faerch, C., & Kasper, G. (1983*). Strategies in Interlanguage Communication. London*: Longman.

Grundy, J. (2020). *The effects of bilingualism on executive functions: An updated quantitative analysis*. Journal of Cultural Cognitive Science, 4(2), 177–199. https://doi.org/10.1007/s41809-020-00062-5

https://doi.org/10.54097/ehss.v8i.4596

Huttenlocher, J. (1974). *The origins of language comprehension*. In R. A. Friedman & L. B. Kravitz (Eds.), Developmental Psycholinguistics and Communication Disorders (pp. 95–124). New York: Academic Press.

Kasper, G., & Kellerman, E. (1997). *Communication Strategies*. London: Longman.

Kużelewska, E. (2016). *Language Policy in Switzerland*. Studies in Logic, Grammar and Rhetoric, 45(1), 125–140. https://doi.org/10.1515/slgr-2016-0020

O'Malley, J. M., & Chamot, A. U. (1990). *Learning Strategies in Second Language Acquisition. Cambridge Applied Linguistics*. Cambridge University Press.

Oxford, R. (1990). *Language Learning Strategies: What Every Teacher Should Know*. New York: Newbury House.

Oxford, R. (1996). *Language Learning Strategies Around the World: Cross-Cultural Perspectives (Technical Report No. 13)*. Honolulu: Second Language Teaching and Curriculum Center, University of Hawaii at Manoa.

Pan, C. (2023). *The Effect of Learning a Second Language at an Early Stage.* Journal of Education, Humanities and Social Sciences, 8, 1854–1859.

Peal, E., & Lambert, W. (1962). T*he relationship of bilingualism to intelligence.* Psychological Monographs, 76(27), 1–23.

Peal, E., & Lambert, W. E. (1962). *Additive bilingualism: The positive effects on language and cognitive development.* In W. F. Mackey (Ed.), Language diversity and cognitive representations (pp. 123-140). Cambridge University Press.

Rubin, J. (1981). *The study of cognitive processes in second language learning.* Applied Linguistics, 2(2), 117–131.

Sachs, J., & Truswell, A. S. (1978). *Projections in syntactic theory: A case study of the modern English passive*. In P. Culicover, T. Wasow, & A. Akmaj

Steinberg, D. D., & Sciarini, N. V. (2006*). Introduction to Psycholinguistics* (2nd ed.). Pearson Longman.

UNIT 9 | LANGUAGE, THOUGHT, AND CULTURE

Introduction

We're glad you're here as we examine the complex connections between language, thought, and culture. We will delve into the fascinating interaction between these three essential facets of human existence. It's critical to understand that culture and language are fluid concepts. They change over time as a result of social, technological, and historical advancements; they adapt, evolve, and change. Our thoughts and our perceptions of the world are shaped and altered by language and culture as they change.

This Language, Thought, and Culture chapter is prepared to assist students in understanding the concept of the interrelationships between language, thought, and culture. This chapter discusses various important topics regarding the theories and concepts presented in order to deepen each student's understanding. In addition, this chapter also provides exercises and tests to help strengthen understanding of language, thought, and culture. Learning materials and activities are designed to meet the needs of students and their understanding of this material. The material is presented and adapted by the teaching team by adjusting student achievements. This chapter aims to provide direction and teaching materials in accordance with the learning outcomes that have been prepared.

You are invited to consider how profoundly these facets of human existence interact and influence our lives as you engage in this exploration of language, thought, and culture. We hope to learn

more about the complexities of language, the depth of human thought, and the variety of cultural expressions as we delve deeper into this fascinating topic. Let this exploration of language, thought, and culture increase our understanding of how intricately these three fundamental facets of the human experience interact with one another. May it arouse interest, advance comprehension, and promote intercultural communication. Have fun exploring what lies ahead and may it broaden your perspectives and deepen your understanding of the fascinating connections between thought, language, and culture.

Introduction

The three pillars of human existence—language, thought, and culture—are intricately intertwined. Our understanding of the world, our interactions with others, and our perceptions of reality are all profoundly shaped and influenced by them. Each of these factors shapes and is shaped by the others, resulting in a dynamic and reciprocal relationship between language, thought, and culture. Through the use of language, we are able to communicate our thoughts, ideas, and feelings. It offers a structure for structuring and communicating meaning. Our thoughts and experiences are significantly shaped by the language we use, which both reflects and reflects them. The words and ideas that are available in a particular language have an impact on how we perceive and comprehend the world. Different vocabularies, grammatical structures, and linguistic characteristics of different languages can cause differences in how people conceptualize and interpret reality. The cognitive processes that take place in our minds, such as perception, memory, reasoning, and problem-solving, are referred to as thought, on the other hand. Our ability to form and communicate complex ideas is made possible by the medium of language. It gives us the ability to categorize information, think critically, and think abstractly. Additionally, language has the power to alter the very structure of our thoughts. We can change how the world appears to us and how we conceptualize it by using linguistic structures and categories. For instance, the fact that some

languages have unique words for ideas that might not exist in others can influence how those languages' native speakers view those ideas.

Language and thought are intimately entwined with culture, which is broadly defined as the shared beliefs, values, customs, and practices of a particular group of people. The way we think, communicate, and interpret the world around us are all shaped by culture. Language serves as a tool for communication as well as a cultural conduit. It displays a society's beliefs, customs, and social structures. Different cultures may have unique linguistic traits, idioms, and expressions that are closely related to their cultural norms and ways of life. In addition, culture affects both the subject and setting of thought. Our cultural upbringing has an impact on our beliefs, values, and attitudes, which in turn have an impact on our way of thinking and how we express ourselves verbally.

The connections between language, thought, and culture are intricate and multifaceted. Thought and culture influence the development and use of language, and language supports the transmission of culture. They interact and co-evolve in a never-ending feedback loop, influencing our perceptions, actions, and social interactions. It is possible to gain insights into the rich diversity of human experience and the ways in which we make sense of the world by understanding how language, thought, and culture interact.

LEARNING LANGUAGE, THOUGHT, AND CULTURE

Picture: https://freepik.com

Purpose:

This chapter is designed to introduce students to the interplay between language, thought, and culture. This aims to equip students with basic knowledge in the relationship between language, thought, and culture.

Aims:
1. Recognize the difference between language, thought, and culture.
2. Recognize how the relationship between language, thought, and culture influence each other.
3. Utilizing language, thought, and culture material when faced with the relevant social conditions.

Unit:
1. A Relationship at the Heart of Psycholinguistics
2. Four Theories of Thought and Culture on Language
3. Erroneous Beliefs Underlying the Four Theories
4. The Best Theory: Thought is Independent of Language

A Relationship at The Heart of Psycholinguistics

Picture: https://freepik.com

Learning Objectives:
1. Students are able to understand the interplay between language, thought, and culture.
2. Students are able to express the results of thinking in language both in oral and written forms.
3. Students are able to understand language as a means of cultural development.

Material Description:
1. Warm Up!
2. A Relationship between Language, Thought, and Culture
3. A Relationship between Language and Culture
4. A Relationship between Language and Thought
5. Activity
6. Task

1. **Let's Warming Up!**

Scan the QR Code below and watch the video about language-cultural conversation then understand The Relationship between Language, Thought, and Culture.

2. **A Relationship between Language, Thought, and Culture**

A major focus of psycholinguistics is the interaction between language, thought, and culture. The fate of foreign language education in the United States and the case of Robert Meyer serve as illustrative examples of the key psycholinguistic issues surrounding the interplay of language, thought, and culture. The case was brought about by a state law in Nebraska that forbade the instruction of foreign languages to children under the age of 13. Meyer, a Sunday School instructor, was detained for breaking the Siman Act of 1919 by telling a 10-year-old boy Bible stories in German. Meyer appealed his case to the Nebraska Supreme Court and then to the US Supreme Court, claiming that the law infringed on his constitutional right to free speech. In the end, the Supreme Court overturned the Nebraska convictions and ruled that any legislation that prohibited the teaching of foreign languages was unconstitutional.

The situation calls into question whether the culture, ideals, and values of a particular people are reflected in a particular language. The state of Nebraska argued that teaching children German would instill in them the evil German values embedded in the language. The Supreme Court, on the other hand, ruled that learning a foreign language does not, by itself, impart the morals and traditions of the nation from which that language is derived. This situation also raises the issue of how to distinguish between "safe" and "harmful" second languages. Children shouldn't be taught a second language if it conflicts with societal morals and values. It is difficult to categorize

languages as "good" or "bad," though, because political climates and ideologies shift over time.

3. **A Relationship between Language and Culture**

According to the Canadian Commission for UNESCO, as cited by Nur Syam, culture is a dynamic value system of educational components that contains assumptions, agreements, beliefs, and rules that enable group members to connect with one another, establish communication, and develop their creative potential.

The relationship between language and culture is the subject of many theories. Some claim that language is a component of culture, while others assert that language and culture are distinct concepts that are inextricably linked. According to some, language is greatly influenced by culture, so it will reflect everything that is present in culture. Others contend, however, that a speaker's or a community of speakers' culture and worldview have a significant impact on the language they use. Language is a component of culture, according to Koentjaraningrat as cited by Abdul Chaer and Leonie in his book Sociolinguistics. Language thus falls under the purview of culture in the relationship between language and culture, which is one of subordination. However, some viewpoints contend that language and culture have a coordinating relationship, which is a relationship of equality and equal weight. Masinambouw claimed that language and culture are two inborn human systems. Language is a system that serves as a vehicle for this interaction, if culture is a system that governs how people

interact in society. The two are therefore like conjoined twins, two closely related phenomena that represent the two sides of a coin, one side representing the linguistic system and the other representing the cultural system.

Language serves as a record of a people's history. Culture and civilization progress along a linguistic road. Language is where culture is first expressed. Only one language can accurately describe the way that people think about the world and how they evaluate it. Unquestionably, sociologists, historians, and linguists assert that a person belongs to the country whose language he speaks and thinks. A byproduct of human society, language is a means of inter-person communication. It is impossible to imagine both the development of language and the development of society without one another. It serves as a tool for international communication as well as inter-human communication.

4. **A Relationship between Language and Thought**

The 19th-century German scholar Wilman helm Von Humboldt emphasized how language is essential to human thought. Knowing the language itself, according to Von Humbolt, is essential to understanding its two main components. The first component is sound, while the second component is the unformed mind. The seaform shapes sound, and the inner or idea form shapes the mind. Thus, in Von Humboldt's view, language is a synthesis of sound (laudform) and idea (ideeform). From this explanation, it can be inferred that while thoughts are an inward form, language sounds are an outward form. What we hear is the outer form of language, but the inner form of language is in the brain. These two forms confine man and dictate his way of thinking. In other words, Von Humboldt argued that a language's structure reveals the speakers' (brains', thinkers') existence. The American linguist Edward Sapir (1884–1939) shared von Humboldt's viewpoint. According to Sapir, people use "affection" as a way of introducing themselves in conversation to one another and to the world around them.

A young student named Benjamin Lee Whorf (1897–1941) disregarded the traditional theory of the connection between language and thinking, which claimed that language and thinking are two distinct things. Whorf concurred with Von Humboldt and Sapir in asserting that language shapes a person's thoughts to the point where he may occasionally injure himself. For instance, according to whorf, a former firefighter, "empty cans" of used oil can explode. Empty refers to something that doesn't contain any oil. Whorf developed the so-called Whorf hypothesis (also known as the Sapir-Whorf hypothesis) regarding the relativity of language after conducting extensive research on the hopi language, one of the Indian languages spoken in California, United States. The idea is that different languages "dissect" nature "this" in different ways, leading to the development of a system of relative concepts that are dependent on the various languages.

French scholar Piaget contends that language is formed through thought, in contrast to Sapir and Whorf's viewpoint. Tone wouldn't exist if language thought didn't exist. The mind, not the other way around, determines the syntax and lexicon aspects of language. According to Piaget, who created the theory of cognitive growth (Piaget, 1965), cognitive development can be explained as having started before a child could speak if they can categorize a group of objects using words that are similar to those objects.

A Russian scholar named Vygotsky made the claim that there are stages in the development of thought and language. These two lines of development then intersect, resulting in simultaneous occurrence of thought and language. Therefore, in the beginning, thought and language did not influence one another in their development. As a result, it began without language and language began without thought. The two eventually meet, collaborate, and have an impact on one another in the following stage. Children think and speak in those ways, using language and logic.

One of the most crucial subjects for those trying to comprehend the nature of human cognition has long been the interaction between culture, language, and thought. For many years, this issue has been studied by numerous research fields. However, communication between these various disciplines is limited. This situation is largely caused by disparities in research priorities and misunderstandings regarding the definitions of important terms like "culture," "language," and "thought". The relationship between language, culture, and thought captures how "language" and "culture" have been defined in terms of cognitive psychology and cultural psychology. The significance of taking into account the intricate relationships between culture and language in order to present a complete picture of how language and culture affect thinking.

5. **Activity**

Scan the QR code below! Watch the video from the QR code, form a group for discussion then analyze and write about your understanding of how language, thought and culture influence each other. After that, discuss with your group and present it in front of the class!

6. Task

Fill the Cross-word Puzzle below with the clue that has been given from the material above!

CROSS	DOWN
3. The relativity of language after conducting extensive research on the 'hopi' language, one of the Indian languages spoken in California, United States called... hypothesis.	1. The Canadian Commission for UNESCO, as cited by...
	2. A byproduct of human society, language is a means of... communication.
5. Language and culture are two inborn human systems, claimed by...	
	4. Children think and speak in those ways "language and thought eventually meet, collaborate, and have an impact in one another in following stage", using language and...
7. The relationship between language, culture, and thought captures how "language" and "culture" have been defined in terms of... psychology and cultural psychology.	
	6. People use... as a way of introducing themselves in conversation to one another and to the world around them.
9. Language is formed through thought, contends by...	
11. Essential to understanding its two main components. The first component is sound, while the second component is the unformed mind.	8. A system that serves as a vehicle for this interaction
	10. Language is a component of...

A. Four Theories of Thought and Culture on Language

Picture: https://freepik.com

Learning Objectives:
1. Students are able to understand the interplay between language, thought, and culture.
2. Students are able to understand the four theories of mind and culture in language.
3. Students are able to understand how the concept of language to cognitive processes and cultural.

Material Description:
1. Theory 1: Speech is essential for thought
2. Theory 2: Language is essential for thought
3. Theory 3: Language determines or shapes our perception of nature
4. Theory 4: Language determines or shapes our cultural world view
5. Activity
6. Task

The majority of people seem to believe that the mind is somehow reliant on language. There are other guises the concept could take, though. The four main theories that have been used

to explain how language, thought, and culture have interacted over time are as follows:

1. **Theory 1: Speech is Essential for Thought**

Popular among behaviorists, the theory that speech is necessary for thought holds that speech is where thought first begins. This theory's proponents contend that behaviors emerge from sound output as thoughts. Psychologists Watson, Skinner, and Staats, linguists Bloomfield and Liberman, and philosophers Ryle and Quine are just a few of the many individuals who have advocated for such concepts. These psychological approaches describe thoughts as subvocal utterances or behaviors, in contrast to traditional psychological approaches.

This theory's proponents contend that instead of thinking being a mental process, thought is actually a behavior that can be observed and managed. There are some problems with this theory, though. First off, children who cannot speak can still understand speech and think. Second, in typically developing children, speech production develops before speech comprehension, which implies thinking. Third, individuals can talk and think about various topics concurrently. Fourth, thinking while lying involves silence. Fifth, meaning and thought can exist independently of action. Finally, interpretation can be performed between languages without verbal communication. Therefore, it is obvious that

speaking is not necessary for thinking, and there are numerous instances that debunk this theory.

Production is always attempting to keep up with comprehension as both processes advance simultaneously. As the child gains proficiency with a language feature in comprehension, they can attempt to learn how to use it in production. The child tries to coordinate production in accordance with the understanding system that has been established (Clark and Hecht, 1983). Therefore, it must be concluded that speech comprehension forms the basis for the development of mental speech in both hearing and typically developing children. Since the ability to understand speech implies the existence of thought, it follows that speech production is not necessary for thought.

2. **Theory 2: Language is Essential for Thought**

Language, with its vocabulary and rules, is said to be essential for thinking, according to the theory. This theory encompasses all languages, including speech production and speech comprehension, making it more inclusive than the prior theory, which contends that thinking emerges from speech production. However, deaf people without language can think, and multilingual people are fully human, both of which have been raised as challenges to this theory. Evidence suggests that deaf children who do not start learning language until they are adults are just as intelligent and sensible about their surroundings as children who can hear. Furthermore, multilingualism did not show any issues with thinking clearly or other issues.

a. Even those who are deaf and cannot speak can think.

No such differences have ever been found, nor has it been proven that late language acquisition in deaf children results in such a dramatic shift in perception. Although deaf people's knowledge of language is typically much less than that of hearing people, research

by Furth (1966, 1971) demonstrated that there is no intelligence difference between normal and deaf people.

b. A multilingual person is complete.

Think of someone who learned two or more languages as a child and is now bilingual or multilingual. If language systems influenced thought, and if different languages influenced thought differently, then these people would develop multiple thought systems. If a person is multilingual, they will not be able to think clearly and will have multiple thought processes (one for each language), which will affect their intelligence and thinking style. There will be a variety of guiding principles associated with various languages.

The development of thinking requires the ability to speak or understand speech as well as the acquisition of languages. The vocabulary norms of the language system are crucial for thinking, according to theorists like Sapir, Whorf, and Vygotsky. Considering both speech production and speech understanding, this hypothesis is more inclusive than the previous one, which contends that thinking results from speech production.

3. **Theory 3: Language Determines or Shapes Our Perception of Nature**

How we perceive the physical world visually, aurally, and in other ways depends on or is influenced by language development. It is unsupported that terminology has an impact on how we perceive nature. In actuality, the evidence points to the opposite being true. One would anticipate that the advocates of the theory would present solid evidence to back their claims on such a crucial subject. The truth is that Sapir, Whorf, and the others really only provide statements to back up their claims.

There are a number of issues with the Whorfian hypothesis, which claims that language influences or shapes how we perceive nature. First off, vocabulary is determined

by perceptions, interests, and needs rather than the other way around. Second, the number of basic color terms in a language has no bearing on how well a person understands color because everyone is capable of distinguishing a wide range of visible spectrum colors. Third, linguistic variations among languages do not reflect variations in conceptual comprehension. Fourth, a lack of vocabulary is not necessarily a sign of conceptual weakness. Fifth, knowledge supersedes word meaning as it is. Finally, because they can use various languages to describe the same reality, multilingual people do not have different perspectives on nature.

4. **Theory 4: Language Determines or Shapes Our Cultural World View**

The fourth theory contends that language shapes our cultural worldview. This theory is challenged by a few factors, though. First of all, despite speaking the same language, people may have different worldviews due to their differing political, religious, and philosophical ideologies. Further evidence that worldviews are not determined by language but rather by other cultural and historical events is provided by the fact that individuals who speak different languages can still share similar worldviews. Third, worldviews can alter over time, even within the same language, as evidenced by the attitudes people have toward issues like LGBTQ+ rights, women's rights, and the abolition of slavery. A multilingual person can have the same beliefs regardless of the language they speak, which is known as having a unified worldview.

LANGUAGES

Although some theorists contend that thought and language can coexist in some degree, they contend that learning a language somehow shapes and affects one's cultural, social, and worldview. If these theorists are right, we might anticipate that linguistic distinctions and affinities will be discovered in pillars like philosophy, religion, politics, and social structure.

When we look into the complicated relationship between language and thought, we find three different interactions. The thinking system is first impacted by language's existence as a cognitive process. Second, conceptual processes that develop prior to language use are affected by language learning. Third, all spoken languages have an impact on how people think.

Humans, unlike animals, can communicate and reason symbolically thanks to language. This supports the claim that concept formation is facilitated by language. Humans are thought to be capable of more complex cognitive processes like causation and understanding the needs, desires, and goals of others. For instance, deaf children with hearing parents occasionally take longer to pick up sign language. These kids can use the signs they have learned to

communicate with people inside the home. However, they only gradually pick up words to describe abstract cognitive and emotional concepts like comprehension, thought, and emotion. In addition, compared to their peers who can hear and express abstract words, it appears that they take longer to understand ideas.

In contrast to this illustration, we see that thinking is not limited to language. For instance, a person with aphasia who struggles to speak due to brain damage may have complex thought structures despite difficulties in being able to express them. Patients with brain injuries can communicate nonverbally when they don't have any conceptual difficulties, according to research done on them. For instance, when asked to describe a route, they can do so using hand gestures if spatial knowledge is still present in the brain.

Research demonstrates the significance of language, particularly language that explains concepts, in the development of cognitive processes. Despite the close relationship between language and thought, not all ideas can be expressed in words. Those who have trouble speaking can communicate their ideas nonverbally in other ways.

Studying infants' conceptual understanding and how it might change with language is the best way to determine whether thinking or cognitive processes exist independently of language. Babies are able to classify things and actions, comprehend how certain events are related to one another, and discern the meaning behind motion. Recent research on action representation and spatial concepts has demonstrated that learning the mother tongue causes positive changes in infants' universal and general action representations. In other words, although children are

universally able to recognize various conceptual relationships, as they learn their mother tongues, they become less sensitive to other languages' accents and become less able to distinguish between different ideas. But as they get older, they can still pick up on those differences if they pay attention or get the right training.

Cultural relativity was founded in the late 1800s by anthropologist Franz Boas. This point of view contends that people view and interpret the world in accordance with the constraints of their culture. Anthropology's job is to look into how people's interactions with the outside world and how their culture shapes them. It is suggested that in order to comprehend such mechanisms, it is necessary to research the implications of culture and language. Eric Safir and Benjamin Lee Whorf's linguistic determinism hypothesis is a reflection of this perspective on the connection between language and thought. According to this theory, concepts that are thought to exist as early as infancy disappear as language is learned and thinking only develops as a result of language. The different perspectives on how language and thought interact are established as poles by this hypothesis. On a number of fronts, we observe this hypothesis being reflected. One of these claims that languages vary according to their linguistic makeup and the words that make them up is the linguistic relativity hypothesis.

The linguistic relativity hypothesis states that the language we use alters how we perceive the world and shapes our concepts. In other words, language is not just used for communication. According to this theory, individuals who speak various languages have various worldviews. People who speak languages like Russian and Greek, for instance, can distinguish between the various shades of green and blue more quickly and easily.

Even more striking is the way gender is used in language to categorize objects. Languages like Spanish, French, and German link gender to objects. What's more intriguing is that words that have male prefixes in one language might have female prefixes in another. For instance, the Spanish word "key" has a female affix while the German word has a male affix. The word "bridge" has a female affix in German and a male affix in Spanish. This is sort of a random match. The test is administered in English as a second language to people whose mother tongues are languages like German or Spanish. Participants were instructed to learn the matches between a number of proper nouns (such as Tom and Kathy) and various object names. Some matches are incongruent (Tom — Bridge: male and female), while others are congruent with their native tongue (if German, Tom — Key, both are male). The findings imply that individuals have trouble learning asynchronous fit, and as a result, their attentional mechanisms may be impacted by particular linguistic structures. The fact that this effect can be discernible and visible even in tests administered to participants in their second languages is an important finding. Multiple concepts or matches can be seen in the language.

Another theory regarding the "relationship between language and thought" contends that language has little to no impact on how people think today. This theory holds that the language we use can temporarily and/or indirectly affect our cognitive functions. Only online thought can be influenced by language-specific symbols. People will inevitably use the meaning that their language conveys when speaking. Recent studies, however, have demonstrated that individuals who focus on distinct aspects of an action (i.e. e. Similar hand gestures are used to indicate the direction of an action (e.g., the way an action "jumps" or the direction of action "over"). These findings demonstrate that language does not always have an impact on thinking.

Finally, it should be noted that although language may influence our cultural worldview, it does not act alone. Our beliefs and attitudes are also influenced by other elements like personal experiences, historical and cultural events, and personality traits.

5. **Activity**

Scan the QR Code below and watch the videos, then see the points in these videos as important information!

Make a debate group of four students, then determine two students as the affirmative (pro) side and the opposition (contra) side with the motion below! Prepare logical arguments and gather factual information to support the arguments!

> **Motion:**
> **Language does not determine thought**

6. **Task**

Make a mind-mapping as interesting and creative as possible from the "Four Theories of Thought and Culture on Language" material described above!
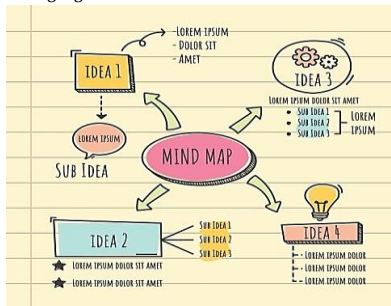
B. Erroneous Belifs Underlying The Four Theories

Picture: https://freepik.com
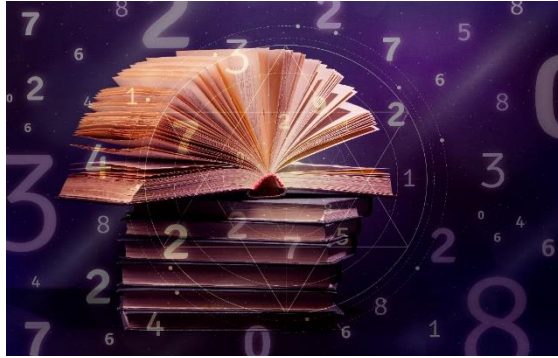
Learning Objectives:
1. Students are able to critically examine and identify erroneous beliefs underlying the four language theories.
2. Students are able to demonstrate knowledge of erroneous beliefs underlying the four language theories.
3. Students are able to develop critical thinking skills by questioning assumptions, challenging established beliefs, and evaluating the validity and reliability of information within the field of language theories.

Material Description:
1. Erroneous belief 1: Their analysis of language is adequate
2. Erroneous belief 2: The meaning of words is linguistic in origin
3. Erroneous belief 3: There are primitive languages and primitive human intelligence
4. Activity
5. Task

Please, Read Carefully!

When discussing erroneous beliefs underlying the four theories, it's important to note that the specific theories and their associated proponents have not been mentioned in your question. However, we can provide you with some general insights into why theorists may advocate certain theories, which can contribute to the formation of erroneous beliefs :

1. Lack of evidence: Sometimes, theorists may advocate certain theories due to a lack of conclusive evidence or limited understanding of a particular phenomenon. In such cases, they might propose explanations based on limited data or incomplete research. However, as more evidence becomes available, these theories may be discredited or refined.

2. Personal biases: Theorists, like anyone else, can be influenced by their personal biases and preconceived notions. These biases can shape their perspectives and lead them to advocate theories that align with their beliefs or agendas, even if the evidence does not support them.

3. Incomplete understanding: The development of scientific theories often involves an iterative process, where new information challenges and refines existing ideas. Sometimes, theorists might propose theories based on an incomplete understanding of the subject matter, leading to erroneous beliefs. As research progresses and knowledge expands, these theories may be invalidated or modified.

4. Cultural or societal influences: The social and cultural context in which theorists operate can influence the theories they advocate. Cultural biases or societal pressures may shape the direction of research, leading to theories that reflect the prevailing beliefs of a particular time or place. However, as our understanding evolves, these theories may be debunked or replaced by more accurate explanations.

It's essential to approach theories with critical thinking, rely on empirical evidence, and subject them to rigorous scrutiny to avoid falling into erroneous beliefs. Science is a self-correcting process that aims to refine and improve our understanding of the world, and theories that cannot withstand scrutiny are ultimately discarded or revised.

Let's Assume!

Certainly! Let's explore a specific example to illustrate how erroneous beliefs can arise and why theorists may advocate certain theories.

Example: Theory of Phlogiston

In the 17th and 18th centuries, the theory of phlogiston was proposed to explain combustion. According to this theory, substances contained a hypothetical substance called phlogiston, which was released during combustion, resulting in the production of fire and the emission of smoke. What led the theorists to advocate the theory of phlogiston ? At the time, there was limited knowledge about the nature of combustion and the chemical processes involved. Observations showed that when a substance burned, it lost weight, leading to the belief that something was being released. The theory of phlogiston provided a plausible explanation based on the available evidence, despite the lack of a comprehensive understanding of chemical reactions. The theorists advocating the theory of phlogiston had an incomplete understanding of combustion and the role of oxygen. They were unaware of the concept of oxidation, which involves substances combining with oxygen to form new compounds. Without this knowledge, the theory of phlogiston seemed reasonable. Cultural influences: The theory of phlogiston was developed during a time when alchemy and mystical ideas still influenced scientific thought. It was a period when the scientific method was not as rigorously applied as it is today. The cultural context and prevailing beliefs influenced the direction of research, leading to the development of theories based on incomplete or inaccurate information.

So, what about the implementation and revision of the theory ? Over time, as scientific understanding progressed, the theory of phlogiston faced significant challenges. Experiments conducted by Antoine Lavoisier in the late 18th century demonstrated that combustion involved the combination of substances with oxygen, rather than the release of phlogiston.

Lavoisier's experiments paved the way for the development of the modern theory of oxidation and the understanding of chemical reactions. The implementation of Lavoisier's experiments and the subsequent revision of the theory of combustion marked a shift in scientific understanding. The erroneous belief in phlogiston was replaced by a more accurate explanation based on empirical evidence and rigorous experimentation. This example demonstrates how scientific progress requires the willingness to challenge existing theories and revise them in light of new evidence.

Please note that the examples we have provided are hypothetical scenarios for illustrative purposes. Let's practice making summaries:

Write on your paper a conclusion about the theory above with at least 6 sentences in your own words!

The three mistaken beliefs you mentioned are often discussed in the context of language and its analysis. Here's a brief overview of each belief and some points to consider :

1. **Erroneous Belief 1 : Their Analysis of Language is Adequate**

   The belief that the analysis of language provided by these theories is sufficient can be questioned. Language is a complex and multifaceted phenomenon (Mufwene, Coupe, & Pellegrino, 2017), and different theories may offer limited perspectives or focus on specific aspects while neglecting others. It's important to recognize that language analysis is an ongoing process, and no single theory can fully capture the intricacies and richness of language. An example that illustrates the potential inadequacy of language analysis is the famous case of color categorization and linguistic relativity. The theories of linguistic relativity, such as the Sapir-Whorf hypothesis, suggest that the structure and vocabulary of a language influence how its speakers perceive and think about the world (Moberg, 2018). One aspect often examined in this context is color categorization. Different languages have

varying ways of dividing the color spectrum into categories. For instance, some languages have specific terms for colors that English would consider as shades of blue or green. This led to the question of whether the language we speak affects our perception and cognition of color. However, research in this area has revealed complexities that challenge the adequacy of language analysis alone. Studies have shown that color perception is influenced by both linguistic and non-linguistic factors. While language can influence how we categorize and label colors, it does not solely determine our perception or understanding of them (Lupyan, Rahman, Boroditsky, & Clark, 2020).

For example, the Himba people in Namibia have different color categories compared to those in English (Yokosawa, Schloss, Asano, & Palmer, 2016). They have distinct terms for various shades of green but lack specific terms for distinguishing between blue and green. However, experiments have demonstrated that Himba speakers are still able to perceive and differentiate between colors that English speakers would categorize as blue and green. This suggests that while language can shape our color categorization to some extent, there are also universal and physiological aspects of color perception that are not solely determined by language. It highlights the limitations of relying solely on language analysis to understand complex cognitive phenomena like color perception. This example underscores the importance of considering multiple factors, including cognitive processes, cultural influences, and perceptual mechanisms, when analyzing language and its impact on human cognition and perception (Ellis, 2019). Language analysis alone may not provide a complete and adequate understanding of complex phenomena, and a multidisciplinary approach is often necessary.

2. Erroneous Belief 2 : The Meaning of Words is Linguistic in Origin

The notion that the meaning of words is solely derived from linguistic factors is a limited view (Romaine, 2017). While language plays a significant role in shaping the meaning of words, the process of word meaning formation is influenced by a variety of factors, including cultural, contextual, experiential, and cognitive aspects. Meanings of words often go beyond linguistic definitions and are shaped by broader social and cognitive frameworks. Certainly! For example that highlights the linguistic origin of word meanings is the word "robot" originated from the Czech word "robota," which means "forced labor" or "serfdom." It was first introduced by the Czech writer Karel Čapek in his play "R.U.R." (Rossum's Universal Robots) in 1920. In the play, robots are artificial beings created to perform tasks for humans. Over time, the term "robot" has taken on a broader meaning in English and other languages. Today, it generally refers to mechanical or electronic devices that can perform tasks automatically or with minimal human intervention. The concept of robots has expanded beyond the fictional realm to encompass real-world applications in fields such as manufacturing, healthcare, and space exploration. This example showcases how the linguistic origin of a word can shape its initial meaning and association. The term "robot" was coined to depict a specific type of artificial labor, but it has since evolved to encompass a broader range of automated systems and technologies. The evolution of word meanings like "robot" demonstrates the dynamic nature of language and its ability to adapt to societal changes, technological advancements, and shifts in cultural context. Language continually evolves as it reflects and responds to the world around us, incorporating new meanings and concepts that emerge in various domains of human activity (MacIntyre, Gregersen, & Mercer, 2020).

Another example that highlights the influence of non-linguistic factors on word meanings in relation to contemporary life is the term "viral" in the context of social media and the internet. In its original linguistic definition, "viral" refers to the rapid spread or replication of a virus or infectious disease. However, in today's digital age, the term has taken on a new meaning within the context of social media and online content. When we talk about something going "viral" on the internet, we are referring to the phenomenon of a piece of content, such as a video, image, or meme, spreading rapidly and widely across various online platforms. It captures the attention and engagement of a large audience, often through sharing and reposting. The shift in the meaning of "viral" from a strictly biological or medical context to the realm of digital media and internet culture illustrates how word meanings can evolve and be influenced by non-linguistic factors such as technological advancements and cultural practices. This example demonstrates that the meaning of a word can extend beyond its linguistic origins and be shaped by the context in which it is used. It showcases the dynamic nature of language and how it adapts to reflect contemporary phenomena and societal changes (Freeman, 2019).

3. **Erroneous Belief 3 : There are Primitive Languages and Primitive Human Intelligence**

The belief in the existence of primitive languages and a correlation between language complexity and human intelligence has been challenged. Linguistic diversity across cultures and languages suggests that there are no "primitive" languages in terms of cognitive sophistication. Language complexity varies across different linguistic systems, but it does not necessarily correlate with levels of human intelligence (Ettlinger, Short, Stutenberg, & Wong, 2016). Intelligence is a multidimensional concept that encompasses various cognitive abilities beyond language. The notion of "primitive languages" and its relationship to human

intelligence is a topic that has been widely discussed in linguistics and anthropology. However, it is important to note that the concept of "primitive languages" has largely been debunked and is considered outdated in contemporary understanding. In current linguistic and anthropological scholarship, there is a recognition that all languages are complex and capable of expressing sophisticated thoughts and ideas. There are no "primitive" languages in terms of cognitive capacity or intellectual capabilities. Language diversity is a reflection of the richness and diversity of human cultures, rather than an indication of varying levels of intelligence. Today, we understand that language complexity varies across different linguistic systems, with each language having its own unique features, structures, and vocabulary. Language complexity is shaped by various factors, including cultural, historical, and environmental influences (Ellis, 2019). However, these variations in complexity do not correlate with differences in the intellectual capacity or intelligence of speakers.

In modern society, we encounter a diverse array of languages and linguistic communities (Joshi, Santy, Budhiraja, Bali, & Choudhury, 2020). Each language represents a distinct cultural and cognitive framework that contributes to the overall tapestry of human expression. Recognizing and appreciating linguistic diversity is crucial for promoting cultural understanding and fostering inclusivity in our globalized world. So, the idea of "primitive languages" and its relation to human intelligence is not supported by contemporary linguistic and anthropological research. All languages, regardless of their structural features or vocabulary, are intricate and capable of conveying complex thoughts and ideas. It is important to clarify that the concept of "primitive languages" is not widely accepted or used in contemporary linguistics or anthropology. However, we will discuss an example that addresses the relationship between language diversity and human intelligence in a

broader sense. Consider the various indigenous languages spoken by communities around the world, such as the indigenous languages of the Americas, Africa, or Australia. These languages have unique linguistic structures, vocabulary, and cultural contexts that have evolved over centuries. While some of these indigenous languages may differ significantly from major global languages in terms of grammar, vocabulary, or writing systems, it is important to note that they are not indicative of lower levels of human intelligence. Speakers of these languages possess the same cognitive capabilities as speakers of any other language (Kroll, Dussias, & Bajo, 2018). In fact, the complex linguistic systems found in many indigenous languages demonstrate the intellectual and cognitive prowess of their speakers. These languages often incorporate intricate grammatical features, complex sentence structures, and rich systems for expressing cultural knowledge and perspectives. Furthermore, the preservation and revitalization of indigenous languages are recognized as crucial for maintaining cultural diversity and fostering a sense of identity and pride among indigenous communities. Efforts to document and revitalize these languages highlight their significance and contribute to a more comprehensive understanding of human linguistic and cultural heritage.

4. **Activity : Exploring Erroneous Beliefs in Language Theories**

Alright! Here's an activity you can engage in to explore the erroneous beliefs underlying the four theories:

Instructions:

Familiarize yourself with the four language theories: Identify and briefly study the four theories you mentioned. Pay attention to their main principles, key proponents, and fundamental claims.

Identify potential erroneous beliefs: Based on your understanding of the theories, critically evaluate each theory and identify any potential erroneous beliefs that may

underlie them. Consider aspects such as language analysis, the origin of word meanings, and the existence of primitive languages and human intelligence.

5. **Task : Analyzing Erroneous Beliefs in Language Theories**

Alright! Here's a task that you can undertake to explore the erroneous beliefs underlying the four theories:

Instructions:

Choose the four language theories: Select the four theories you want to focus on and list them for reference.

Identify the main beliefs: For each theory, identify the core beliefs and claims put forth by its proponents. Take note of the key ideas and concepts that form the foundation of each theory.

Analyze potential erroneous beliefs: Analyze each theory critically and identify any potential erroneous beliefs that may be underlying them. Look for aspects such as flawed assumptions, oversimplifications, or limitations in the theories' frameworks.

Reflect and draw conclusions: Reflect on the implications of these erroneous beliefs and their potential impact on our understanding of language. Consider how these beliefs might hinder a comprehensive and accurate understanding of language and its complexities.

Share and discuss: If possible, share your findings and analysis with others who have an interest in language or linguistics. Engage in discussions or seek feedback from peers, educators, or online communities. Encourage constructive dialogue and exchange of ideas to deepen your understanding and gain different perspectives.

C. The Best Theory: Thought is Independent of Language

Picture: https://freepik.com
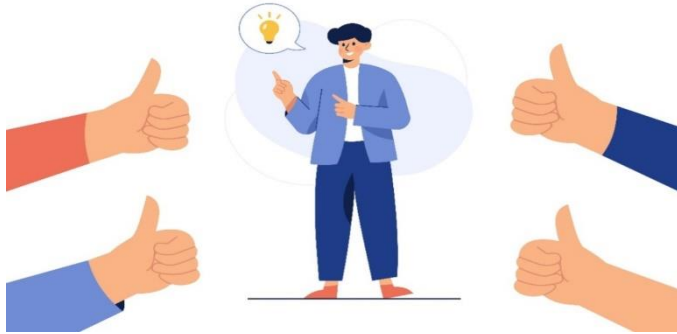
Learning Objectives:
1. Students are able to practice communicating they thoughts effectively through speaking, writing, and engaging in discussions or debates.
2. Students are able to familiarize themself with the key concepts, arguments, and perspectives related to the theory that thought is independent of language.
3. Students are able to reflect on their experiences and observations related to thought and language.

Material Description:
1. Thought is independent of language
2. The development of thought precedes the development of language
3. The notion of 'thinking in language' is a fallacy
4. Activity
5. Task

The idea that thought is independent of language is a topic of debate among philosophers, linguists, and cognitive scientists. While there are various opinions on this, let's go through some information on the different perspectives and arguments regarding this theory. Firstly, the theory of linguistic relativity, also known as the Sapir-Whorf hypothesis, suggests that language influences the way we think (Wang, 2016). According to this perspective, the structure and vocabulary of a language shape and limit the concepts and thoughts that individuals can express and comprehend. In other words, language acts as a framework that structures and influences our cognitive processes. Secondly universal thought structures, on the other hand proponents of the idea that thought is independent of language argue that there are universal thought structures that exist independently of any particular language. They propose that there are fundamental cognitive processes, such as perception, memory, categorization, and problem-solving, that are not tied to any specific linguistic system (Zhang, 2019). These cognitive processes are thought to be shared by all human beings, regardless of the language they speak. And the last non-Linguistic Thought: Another argument supporting the independence of thought from language is based on the existence of non-linguistic forms of thought (Vokhidovna, 2022). For example, visual thinking, spatial reasoning, and abstract reasoning are considered to be cognitive abilities that can operate

without reliance on language. Supporters of this view suggest that while language can enhance and facilitate certain types of thinking, it is not a prerequisite for thought itself. It's important to note that this topic is complex and still subject to ongoing research and discussion. There is no consensus among experts, and different perspectives offer valid insights into the relationship between thought and language.

Thought is independent of language, that language is dependent on thought, and that the function of language is to provide a means for the expression and communication of thought, that was advocated by the philosopher John Locke some three centuries ago. The belief that thought is independent of language is a perspective held by some philosophers and scholars. This view suggests that human thought can occur without reliance on language and that language is merely a tool for expressing and communicating pre-existing thoughts. Proponents of this viewpoint argue that there are forms of thought that exist prior to or beyond the limitations of language. They often cite examples such as visual thinking, mathematical reasoning, or nonverbal problem-solving as evidence that thought can exist independently of linguistic representation. On the other hand, there are alternative theories that propose language plays a crucial role in shaping and organizing our thoughts. These theories argue that language not only expresses our thoughts but also influences the way we think by providing a framework for categorization, conceptualization, and reasoning. It's important to note that this topic is still a subject of ongoing debate among linguists, psychologists, and philosophers. Different scholars have different perspectives on the relationship between thought and language, and there is no consensus on the matter.

1. Thought is Independent of Language

The question of whether thought is independent of language is a complex and debated issue within the fields of philosophy, linguistics, and cognitive science. There are valid arguments on both sides of the debate. Some argue that

thought can exist independently of language, pointing to non-linguistic forms of thought, cognitive abilities present in preverbal infants, and cross-cultural variations in thought patterns. These proponents believe that language is a tool used to express and communicate thoughts, but not a prerequisite for thinking itself. On the other hand, proponents of the theory of linguistic relativity argue that language significantly influences thought processes. They suggest that the structure, vocabulary, and categories present in a language shape the way individuals perceive and interpret the world. According to this view, language acts as a framework that structures and constrains our thinking. It is important to note that research on this topic is ongoing, and there is no definitive answer. Different perspectives and empirical studies offer valuable insights into the complex relationship between thought and language. The nature of this debate invites critical analysis, examination of evidence, and consideration of diverse viewpoints. Ultimately, forming your own opinion on whether thought is independent of language would require a comprehensive study of the relevant literature, engaging with different arguments, and evaluating the supporting evidence.

Here are some perspectives from leading experts who have addressed the topic of language-independent thinking. Here are some examples:

- Noam Chomsky: Chomsky, a renowned linguist and cognitive scientist, has argued that language is a distinct chapter of the mind, separate from other cognitive processes. According to him, thought and language are independent systems, with language serving as a tool for expressing already-formed thoughts.
- Steven Pinker: Pinker, a cognitive scientist and linguist, has suggested that there are aspects of thought that are independent of language. He argues that certain cognitive abilities, such as basic perception, mathematical reasoning, and social emotions, can function independently of linguistic processes.
- Eleanor Rosch: Rosch, a cognitive psychologist known for her work on categorization and cognitive prototypes, has proposed that basic perceptual and conceptual structures are prelinguistic. She suggests that thought processes involve non-linguistic representations that shape our understanding of the world.

While it is challenging to provide definitive data or proof that thought is completely independent of language, here are some reasons and observations that support the idea:

a. Non-Linguistic Cognitive Abilities: There are cognitive processes that occur without explicit reliance on language. For example, basic sensory perception, emotional experiences, and motor skills can be understood and acted upon without the need for linguistic mediation. This suggests that thought can exist independently of language in these domains.

b. Preverbal Development: Infants and young children exhibit cognitive abilities and engage in problem-solving before acquiring full proficiency in language. This indicates that certain aspects of thought, such as object permanence or imitation, can develop independently and precede linguistic expression.

c. Cross-Cultural Variations: Different languages and cultures categorize and represent the world in distinct ways. This suggests that underlying cognitive processes are not solely determined by language but are influenced by cultural factors. The existence of universal cognitive abilities across diverse linguistic communities supports the idea that thought can be independent of specific languages.

d. Cognitive Abilities in Non-Human Animals: Observations of non-human animals demonstrate that they possess cognitive abilities, such as problem-solving, memory, and communication, without language as humans understand it. This suggests that thought is not solely reliant on linguistic systems and can operate independently.

It's important to note that while these reasons provide support for the independence of thought from language, they do not negate the significant role that language plays in shaping and influencing our thinking processes. Language is a powerful tool that enables complex communication, reasoning, and conceptualization. The relationship between

thought and language is complex and multifaceted, and both have intertwined influences on each other.

Let's solve the problem!

Look! Here's a case example and potential solutions that relate to the idea that thought is independent of language:

Case Example:

Imagine a scenario where two individuals from different linguistic backgrounds, let's call them Kevin and Melisa, are trying to solve a complex problem together. Alice is a native English speaker, while Bob speaks Mandarin Chinese. They both have expertise in different aspects of the problem but face difficulty communicating due to the language barrier.

Let's discuss with your partner how they build good communication to solve a problem ?

2. **The Development of Thought Precedes the Development of Language**

As thought develops, the child seeks to express those thoughts to others. The statement suggests that as a child's thought processes develop, they naturally seek to express their thoughts to others. This viewpoint aligns with the idea that language and communication are fundamental aspects of human development and social interaction. Children start developing their thoughts and ideas from an early age, and as their cognitive abilities mature, they become increasingly eager to share their perspectives, experiences, and understanding of the world with others. Language plays a crucial role in facilitating this expression and communication of thoughts. Here are a few reasons why children may seek to express their thoughts to others as their thinking develops. First, social interaction and connection, humans are inherently social beings, and sharing thoughts and ideas with

168

others helps children establish connections, build relationships, and gain a sense of belonging. Expressing thoughts allows children to engage in meaningful interactions, receive feedback, and expand their understanding through conversations with peers, parents, and educators. Second, validation and affirmation, sharing thoughts and ideas with others provides children with a sense of validation and affirmation. When their thoughts are acknowledged, listened to, and understood by others, it reinforces their confidence and self-esteem, encouraging further expression and exploration of their developing thoughts. And the last is language development, it means expressing thoughts to others promotes language development. Through verbalizing their ideas, children refine their vocabulary, sentence structure, and communication skills. The process of expressing thoughts helps them organize their thinking and develop more complex and coherent language abilities. Overall, the statement highlights the natural inclination of children to express their thoughts to others as they develop cognitively and linguistically. It underscores the significance of language as a tool for sharing, connecting, and furthering cognitive and social development in children. Through speech understanding the child develops a grammar and finds a means through speech production to provide meaningful speech. The statement suggests that through speech understanding, a child develops grammar and finds a means to produce meaningful speech. This perspective aligns with theories of language acquisition that emphasize the role of speech comprehension and production in language development. Children acquire language skills by engaging in a process of active listening, comprehension, and imitation. Here are a few key points related to the statement. One fact about the development of thought and language is that research in developmental psychology suggests that the development of thought precedes the development of

language in infants and young children. During the early stages of cognitive development, infants engage in various forms of thinking and problem-solving before they acquire language skills. For example, infants exhibit object permanence, the understanding that objects continue to exist even when they are out of sight, before they can express this concept through language. They also demonstrate rudimentary logical reasoning and cause-and-effect understanding through their actions and behaviors.

This suggests that cognitive processes and thought development occur before the acquisition and expression of language. Infants and young children gradually develop the ability to think, reason, and solve problems internally before they are able to communicate their thoughts and ideas using language.

3. **The Notion of 'Thinking in Language' is a Fallacy**

Regarding the notion of "thinking in language," it is important to note that language and thought are closely intertwined and often influence each other. However, it is also recognized that not all thinking occurs solely in language.

Here is a fact that you may consider as a student:

While language plays a crucial role in shaping and organizing our thoughts, not all thinking processes are exclusively conducted through language. Research in cognitive science suggests that thinking can take various forms, including non-linguistic and preverbal forms of cognition. For example, infants and young children engage in cognitive processes, problem-solving, and decision-making before they acquire language skills. Similarly, individuals who are proficient in multiple languages often report experiencing thoughts or ideas that are not solely bound to a specific language. Additionally, some types of thinking, such

as visual or spatial thinking, may rely more heavily on non-linguistic mental representations. For instance, when solving a visual puzzle or navigating a physical space, individuals often rely on mental imagery and spatial reasoning rather than explicit verbalization. While language provides a powerful tool for organizing and communicating our thoughts, it is not the exclusive medium through which all thinking occurs. The relationship between language and thought is complex and multidimensional, involving a combination of linguistic and non-linguistic cognitive processes. It is essential to recognize that individuals can engage in various forms of thinking, including those that extend beyond the confines of language. Embracing a broader perspective on the relationship between language and thought allows for a more comprehensive understanding of human cognition.

Different View: Thinking in Language is Not a Fallacy ?

In today's society, there are perspectives that argue against the notion that thinking in language is a fallacy. What if thinking in language is not a fallacy ? Language is considered by many as the primary medium through which thinking occurs. It is argued that language provides the structure, vocabulary, and syntax necessary for complex cognitive processes, including problem-solving, critical thinking, and abstract reasoning. Without language, it is believed that our ability to engage in advanced thinking would be severely limited. Language is seen as a cognitive tool that shapes and influences our thoughts. According to linguistic relativity theory, different languages structure reality differently, leading to variations in how individuals perceive and interpret the world. Language provides a framework for organizing thoughts and constructing meaning, enabling individuals to think within the conceptual boundaries and cultural context of their language. Language

and Self-Reflection: Language allows us to engage in self-reflection and introspection, facilitating the development of metacognitive skills. Through linguistic expression, we can analyze and evaluate our thoughts, emotions, and experiences, leading to deeper self-awareness and personal growth. Language enables us to reflect on our thoughts and make conscious decisions based on reasoning and self-understanding. Language is vital for effective communication and collaboration with others.

Thinking in language enables us to articulate our thoughts, share ideas, and engage in meaningful dialogue. By expressing our thoughts through language, we can receive feedback, gain new insights, and refine our thinking. Language serves as a medium for social interaction and intellectual exchange, contributing to collective intelligence and societal progress. Cultural Transmission: Language is deeply intertwined with culture and plays a significant role in the transmission of knowledge, values, and beliefs across generations. Thinking in language allows individuals to access and inherit cultural wisdom, traditions, and accumulated knowledge. It enables the preservation and evolution of culture, fostering a sense of identity and belonging within society. In this discussion, thinking in language is seen as a fundamental and inseparable aspect of human cognition. Language is viewed as an integral tool for thought, influencing our perception, self-reflection, communication, collaboration, and cultural development. It is considered a crucial element in shaping our cognitive processes and facilitating meaningful engagement with the world and others.

Are you agree? Non-linguistic Thought in Experts and Skilled Individuals?

Studies have shown that experts and highly skilled individuals often engage in non-linguistic thought processes when performing tasks within their domain of expertise.

These individuals demonstrate the ability to think and make decisions based on intuitive, automatic, and non-verbal mental processes. Creative individuals often report relying on non-linguistic thought processes during moments of insight and inspiration. Ideas and solutions can emerge spontaneously and unconsciously, bypassing explicit language-based reasoning. This highlights the capacity for non-linguistic thinking to foster creativity and originality. These examples demonstrate that thinking can occur beyond the boundaries of language and verbal reasoning. Non-linguistic thought processes, such as intuition, pattern recognition, embodied cognition, and creative insights, play a significant role in expert performance, optimal experiences, and innovative problem-solving. They highlight the fallacy of assuming that thinking is exclusively bound to language and emphasize the richness and diversity of cognitive processes.

The debate around thinking in language as a fallacy is complex and multifaceted. While language undoubtedly plays a significant role in shaping our thoughts, the existence of non-linguistic thinking processes, preverbal cognition, multilingual experiences, and non-human cognition suggests that thinking can occur independently of language. However, language also serves as a tool for thought, shapes our conceptual frameworks, and influences our perception of the world. The relationship between language and thought is interwoven, but the extent of language's influence and its exclusivity in the thinking process remain subjects of ongoing research and discussion.

Let's assume you guys prefer thinking in language is a fallacy or thinking in language is not a fallacy? Discuss with your partner

4. **Activity : Silent Mind Mapping**

Materials Needed: Large whiteboard, markers, or individual whiteboards/paper, markers for each student.

Instructions: Please scan this barcode to complete the activity
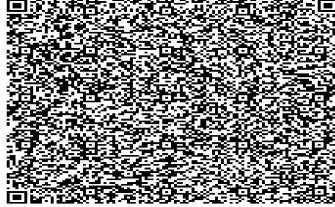
5. **Task**

After the activity, please answer the questions below individually, then share with your friends. Don't forget to scan this barcode.

UNIT
10

WHERE DOES LANGUAGE COME FROM? INTELLIGENCE, INNATE LANGUAGE IDEAS, OR BEHAVIORS?

Learning Objectives:
1. To identify important factors that influence human language development.
2. To gain a deeper understanding of how humans acquire language knowledge.
3. To examine how an individual's level of intelligence can affect their ability to learn and use language.
4. To learn how communication behaviours and experiences affect language development.

Where Does Language Knowledge Come From?
Intelligence, Innate Language Ideas, Behaviour?

Does the infant human use intelligence, innate language concepts, or both? If using intelligence is what it is, are infants born with this ability or do they have the opportunity to develop it? considering that way, what are these concepts, and how are they created in order to help the child learn language, assuming it is the usage of essential language ideas? Or, is it possible that

neither matter and the solution can be found by researching the functions or conditioning of behavior?

A. Mentalism vs. Materialism

The existence of the mind might be acknowledged by other behaviorists like Skinner (1971) and Osgood (1971), but they wouldn't give it any power and most surely wouldn't do any research into it. A similar viewpoint is expressed in the philosophical Behaviourist ideas of Ryle (1949) and Quine (1960), who argue that bodily tendencies for certain behaviors should be the focus of psychological research rather than the mind. These theories believe that the mind and mental functions can be reduced to bodily physiological functions.

In contrast to viewpoints that are focused on materialism that were discussed earlier, the Mentalist believes that thinking and matter have independent natures. In order to understand the processes underlying newborn language acquisition, the majority of modern psycholinguists and linguists are mentalists, stressing the study of the mind and the interaction between the body and the mind.

The Interactionist and the Idealist are the two fundamental types of mind-body relationships with regard to environmental cues and behavioral reactions in the world. These two viewpoints are described as follows:

1. Interactionism: The body and mind are considered to interact in such a way that one can affect or create conditions in the other. This interactionist viewpoint, which is similar to the one developed by Descartes (1641, Meditation VI), holds that humans react in certain ways as a result of interactions between the body and the mind or independent bodily actions.

2. Idealism: A number of mentalists, such as Plato, Berkeley at the beginning of the eighteenth century, and Hegel in the nineteenth, took the extreme position that the universe is totally composed of mind. According to the radical Mentalist position known as Idealism, the body and the rest of the

physical universe are essentially mental Where Does Language Knowledge Come From structures. The universe solely exists in the imaginations of aware individuals, and the only real material is mental.

B. **Behaviourist wars: Materialism vs. Epiphenomenalism vs. Reductionism**
1. Materialism: In this theory, there is simply the physical body. Since the mind is a fabrication, only the body should be researched.
2. Epiphenomenalism: This viewpoint's primary concept is that, despite the existence of both the body and the mind, the mind simply serves as a reflection of the things that are happening in the body.
3. Reductionism: While both the body and the mind have been proven to exist, reductionists also hold that the mind may be reduced to the physical, or the body.

C. **Philosophical Functionalism**

Similar to behaviorism, functionalism is a form of materialism. Even when functionalists admit the existence of mind and consciousness, like Chalmers does, they define these concepts in terms of physicality. The foundation of cognitive studies is functionalism, which attempts to identify principles that are shared by all intelligent systems for processing by removing from the details of physical implementation. The main idea of functionalism is that the mind can live in anything other than the brain.

D. **Mentalist Wars: Empiricism's Intelligence vs. Rationalism's Innate Ideas**
1. **Empiricism**

Understanding a person's behavior, including speech, requires research into the mental processes that give rise to that behavior. The definition of mentalism is the belief in the mind, concepts, consciousness, and the role of consciousness in conduct.

a. Empiricist view no. 1: Intelligence is derived from experience

Arguments between empiricists include whether intelligence is innate. Therefore, intelligence is viewed as a tool for getting information rather than as knowledge itself. Experience then imprints ideas on it, and intelligence emerges from those ideas, according to Locke's radical theory.

b. Empiricist view no. 2: Intelligence or its basis is innate

According to this theory, children are born knowing the fundamentals of both inductive and deductive reasoning, including the fundamentals of propositions and the entities they involve. Children learn about the world and the language they might use to interact with it and the people in it through the application of these analytical and logical processes to the data they encounter.

2. Rationalism

All rationalists agree on the core idea that humans are born with some knowledge. Some Rationalists, for instance, have claimed that concepts like "justice," "infinity," "God," "perfection," and "triangle" are innate. The Rationalists, however, find it difficult to articulate how any such ideas came to be established in people in the first place. Natural understanding wouldn't have been anything that could have been learned without much experience, would it? Descartes (1641) responds directly to the question with the simple statement, "God ingrained ideas in human minds."

3. Chomskyan Arguments for Innate Language Ideas
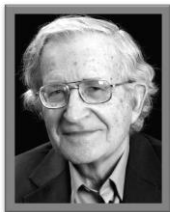
According to Chomsky, everyone is born with a mind that is packed with knowledge on a number of issues. e. 'Universal Grammar' refers to the group of innate linguistic ideas that make up the language faculty. It is important to

remember that universal grammar is not functional or operational until a person receives specific speech input from the environment. Universal grammar, in Chomsky's viewpoint, is the basic grammar that includes the principles that apply to all languages. The other aspects of the grammar of any particular language are called "peripheral Source: grammar" and a "mental lexicon." https://www.pensador.com/

Chomsky (1986) discovered that children naturally comprehend (1) the basic ideas behind the many Universal Grammar subsystems, (2) the dynamics of those interactions, and (3) the parameters associated with these basic ideas. The specific topic of these multiple UG categories is not specified by Chomsky. Chomsky claims that Universal Grammar exists, although there is yet no compelling evidence to back this claim. All of Chomsky's arguments against Universal Grammar have been proven to be false.

> **?** It is time for Emergentism to re-emerge?

Emergentism, a kind of Empiricism that was predominant in the early 20th century and has now returned in a revised version (Sperry, 1969; Beckermann et al., 1992; McLaughlin, 1992), is a recent development. It represents the Mind-Body Interactionism point of view. Emergentism's central assumption is that some higher-level qualities are emergent in the sense that, despite only occurring under particular physical circumstances, they are neither explainable nor predictable in terms of the underlying physical properties. The qualities of the mind are truly unique and provide the universe special causal capacities. The most commonplace human observations suggest that mind does, in fact, have an impact on behavior.

Take a look at the questions below!
To test your understanding, answer the following questions according to what you have read in

the previous material explanations!

INDIVIDUAL TASK

1. What is the fundamental building block of language proficiency—the complex interaction between a person's brain, their environment, and their experiences?
2. In intelligence, learning problems can cause serious difficulty for kids learning to read and write. Describe a few of them.
3. Why does the mentalist think that mind has a different nature from matter?
4. What is an example of mind impacting our body?
5. Explain the difference between Materialism, Epiphenomenalism, and Reductionism.

GROUP ACTIVITY

Form a group of 5 people. Choose one concept (intelligence, innate language ideas, or behavior) in the context of the origin of language knowledge. Create a poster or infographic that presents the concept in a clear and visual way. Next, follow these instructions:

- Use a simple online graphic design tool such as Canva or Piktochart.
- Design your poster or infographic with attention to an attractive and easy-to-read layout.
- Use relevant icons, images, graphics and text to clearly illustrate the information.
- Include key points or quotes that explain concepts in a concise and easy-to-understand manner.

After that, save the poster or infographic in an appropriate format (e.g., image or PDF) and present it in front of your classmates in the class!

REFERENCES

Aktar, A. (2018). Scholar Journal of Business and Social Science A Critical Study of Psycholinguistics and Language Acquisition Theories. School Journals , 16-23.

Anthropological Institute: https://mentalismaster.com/the-debate-mentalism-vs-materialism/

Blundell, J. (2014). Cambridge IGCSE® Sociology Coursebook. Cambridge University Press.

Cardini, F. E. (2023). Consciousness and the Cultural Invention of Langauge. New York: Routledge.

Danny D. Steinberg, N. V. (2006). An Introduction to Psycholinguistics. Person Education Limited.

Darmawati, B. (2022). PSYCHOLINGUISTICS: A comprehensive review. 6.

Jackendoff, R. (n.d.). How Did Language Begin? Retrieved June 6, 2023, from Linguistic Society of America: https://www.linguisticsociety.org/resource/faq-how-did languagebegin#:~:text=Some%20researchers%20claim%20that%20everything,and%20the%20ability %20to%20cooperate.

Riau, U. I. (2022). Where Does Language Knowledge Come From. Studocu.

Studycat. (2018). The Perfect Age for Language Learning. Retrieved May 23, 2023, from the Asian Parent: https://sg.theasianparent.com/critical-age-for-learning-language

The Debate: Mentalism Vs Materialism. (2021, December 9). Retrieved june 6, 2023, from Royal

Ulil Fitriyah, T. T. (2023). Critical Period Hypothesis on Foreign Language. Advances in Social Science, Education and Humanities Research , 376-379.

UNIT 11

NATURAL GRAMMAR, MIND, AND SPEAKER PERFORMANCE

Introduction

Welcome to this chapter on natural grammar, mind, and speaker performance. In this chapter, we will explore the psychological aspects of grammar, the historical debates surrounding it, and the interplay between speech production, speech understanding, and language development in children. Our focus will be on evaluating the psychological effects of the current grammatical system and introducing a novel concept called Natural Grammar.

We will examine the psychological suitability of grammar and discuss the contrasting viewpoints within the linguistics community regarding whether grammar should capture speakers' knowledge of a language or be represented in formal terms isolated from psychological entities. We will also delve into the evolution of linguist Noam Chomsky's ideas, from his early opposition to mentalism to his acceptance of mentalistic linguistics and the concept of Universal Grammar.

We will also discuss Chomsky's syntax-based grammar inadequacy as an explanation, emphasizing the difference between competence and performance in language use. We will look at Chomsky's theories' contradictions and psychological inconsistencies, particularly as they relate to language acquisition and the innate language faculty.

We'll also talk about an empirical issue with Chomsky's theory of the ideal speaker-hearer and the creation of performance-related grammar that seeks to explain language processing in psychologically sound ways. Cognitive grammar and functionalist grammar, which highlight the significance of meaning and cognitive processing in grammar, are two noteworthy approaches in this regard.

Finally, we will concentrate on how important speech comprehension is for learning a language as well as how children's speech develops. We'll talk about how functionalist and cognitive grammars fall short of adequately capturing the process of learning a language and make the case that speech comprehension is essential.

Our goal in this chapter is to assess the current grammatical structure critically and offer substitute viewpoints that take the psychological components of language into account. Our proposed theory, Natural Grammar, aims to provide a thorough explanation of language by taking into account the mental operations necessary for speech generation and comprehension.

We hope you found this chapter useful and thought-provoking. Let's explore the intriguing worlds of natural grammar, the mind, and speaker performance!

Natural Grammar, Mind, And Speaker Performance

https://www.dreamstime.com/royalty-free-stock-photo-knowledge-creative-mind-speaker-image5627545

A. Psychological Criteria for Assessing Grammars

Linguists have been fascinated by language, a complex and interesting phenomenon, for millennia. There has been a long-running argument within the linguistics community about what the discipline's main objective should be (Rod & Richard, 2020). Should grammar capture what speakers know about a language and all terms pertain to psychological phenomena, or should grammar represent language in formal terms isolated from psychological entities? We examine the psychological suitability of grammar and the historical discussion around it in this book (John & Georges, Chomsky and Intentionality, 2021). We also look at the complex interplay between speech production, speech understanding, and language development in children (David & Linda, 2020). Our ultimate goal is to evaluate the psychological effects of the current grammatical system while introducing a novel (Dornyei & Zoltan, 2019) and distinctive psychological concept termed Natural Grammar (Diana & Antoni, 2021).

Psychological Criterion No. 1 - A 'God's Truth' Grammar

B. Linguistics as a Branch of Psychology

The place of psychology in linguistics was a contentious topic among linguists at the start of the 20th century (Ryan, 2019). Some argued that their linguistic descriptions were psychologically valid (Fritz, Luca , & Marco, 2019) and served as accurate summaries of what people had learned. Others disapproved of linguistics' psychological objective and saw language descriptions as mere formalisms (James , 2019) suitable for notation. This section examines the key distinctions between these opposing viewpoints, using linguist Householder's dichotomy of "God's Truth vs. Hocus-Pocus" as an illustration. (Steven, 2023) We also notice the fascinating perspective changes that eminent linguist Chomsky exhibits.

C. The Illustrative Case of Chomsky: His Shift from Hocus-Pocus to God's Truth

Chomsky's theoretical advancement offers an insightful case study to comprehend the different viewpoints on the purpose of linguistics (Tasawar & Hafiz , 2022). Chomsky supported both the Mentalistic, psychologically-focused God's Truth method and the formalistic, non-psychological Hocus-Pocus approach at various points in his career. An in-depth discussion of Chomsky's evolution from his initial opposition to Mentalism and semantic considerations to his final acceptance of Mentalistic linguistics is provided in this section. We look at Chomsky's crucial contribution to the development of the "God's Truth" movement in contemporary linguistics and the subsequent adoption of his ideas (Charles , 2020).

Chomsky's 1950s Hocus-Pocus Period

In his early theories, Chomsky passionately resisted Mentalism and rejected the idea that grammar should include meaning and semantics (Allen, Walker Read, 2019). His work was on creating generative grammar, a formalistic system that could distinguish between grammatical and non-grammatical sequences. This grammar's main goal was to generate grammatical strings without regard for the speaker's understanding or mental processes. This section examines Chomsky's opposition to mentalism at the time and his influential writings, including Syntactic Structures and his Ph.D. dissertation (Allen Walker Read, 2019).

Chomsky's Embrace of God's Truth Mentalism

In an unexpected turn of events, Chomsky changed his mind and supported mentalistic linguistics in the decade that followed. (John & Georges, Chomsky and Intentionality, 2021) He claimed that linguistics is a subfield of cognitive psychology and that language activity is grounded in a mental reality. Chomsky's support for Mentalism led to the idea that speakers generate language in their heads. We dissect Chomsky's claim that every speaker has an internalized generative grammar and

consider how his ideas have affected the study of linguistics (Nick, 2018). Additionally, we look at his later writings, such as Cartesian Linguistics and Language and Mind, where he defended mental grammar and advanced the idea of Universal Grammar (Ulrike & Hanna, 2023).

The Explanatory Inadequacy of Chomsky's Syntax-Based Grammar

Provided an analysis of a linguistic phenomenon included a plausible explanation for how the phenomenon is learned by the language learner, it was referred to as having "explanatory adequacy" (Cipriani, 2021). Chomsky defined syntax as the study of the rules and procedures used in particular languages to create sentences (Purnomoadjie & Mulyadi, 2019).

1. Chomsky's Competence–Performance Theory

    Competence and performance are distinct concepts according to Chomsky, who defines "competence" as an idealized capacity that is situated as a psychological or mental quality or function and "performance" as the creation of actual utterances (Yufrizal, 2023). According to Chomsky, the two main objectives of psycholinguistics are: first to describe how humans employ competence to be able to make and comprehend sentences (a theory of performance) and second describe how children develop competence. By Chomsky's division of labor, which he defined (Chomsky, 1965), linguists are responsible for describing grammar, whereas psycholinguists are responsible for describing how grammar is learned and employed in performance. This maxim has often been disregarded by psycholinguists.

2. Why Chomsky's grammar itself cannot be a performance model

    It appears that Chomsky's grammar does not apply to either of the performance processes of speech comprehension or production due to the way it is organized, with syntax taking precedence. Sound must be the initial input and meaning must be the final product of a true comprehension

process. (A human interprets speech sounds by giving them meaning). The schema for the comprehension process would be:

Speech comprehension process

Sound → X → Meaning

In contrast, the input and output of a true production process are meaning and sound, respectively. (A person has thoughts that are expressed through spoken sounds that reflect their meaning). The schema for such a process would be:

Speech production process

Meaning → X → Sound

3. The psychological contradiction in Chomsky's theorizing

The way Chomsky defines language learning and the innate language faculty demonstrates one of his key psychological inconsistencies. According to Chomsky, language acquisition is based on an innate, universal grammar that exists in all people (Sharma, 2022). His hypothesis states that kids are born with a set of linguistic rules and structures that allow them to pick up whatever language they are exposed to. This viewpoint, however, runs counter to empirical research in cognitive science and developmental psychology. According to research, children's linguistic input and the social environment in which they develop have an impact on how they pick up languages. There isn't a single, innate grammar that applies to all cultures and environments, according to the heterogeneity in language development across diverse environments and civilizations.

Moreover, Chomsky's theory of universal grammar is mainly reliant on hypothetical notions and lacks solid empirical support (Leivada & Murphy, 2022). The idea of a domain-specific, intrinsic language faculty prompts inquiries concerning its nature and genesis. According to Chomsky's hypothesis, general cognitive processes alone cannot account

for the richness and specificity of language, however, there is little solid evidence to back up this claim.

Chomsky's emphasis on the formal, rule-based aspects of language while ignoring the social and communicative purposes of language leads to another contradiction. Language is a tool for social interaction and the creation of meaning in addition to being a formal system of rules. Chomsky's theory ignores the complex social and cultural components of language use by concentrating primarily on syntax and grammar (Ishtiaq, Kamal, & Iqbal, 2022). In conclusion, psychological conflicts are presented by Chomsky's theories.

4. An empirical problem with Chomsky's notion of an idealized speaker-hearer

Chomsky declared to have reached a final steady state of linguistic knowledge in two different ways (Nefdt, 2023). One is about the final state that Chomsky (1986, p. 25) refers to as "relatively stable," and the other is about the final state that embodies the generative grammar made up of several syntactic laws and circumstances. (Stable state of language knowledge is tested & Speaker conformity to grammatical knowledge is tested).

Chomsky's theory was proposed based on arguments that, if empirically verified, might not support his reasoning. His idea of an ideal speaker-hearer who possesses a complete command of language and the outcomes attained in speaker performance appears to be at odds with one another (Collins, 2023).

Performance-Related Grammar

Many thoughtful linguists and psycholinguists have been perplexed by Chomsky's peculiar grammar, which holds that syntax is primary and apart from meaning and sound. As a result, many people rejected Chomsky's idea of grammar and generally came up with grammatical notions that gave meaning to the first function and syntax and sound to the secondary. All

of these grammars give meaning the major role while giving syntax and sound the interpretive function. Most opposition theorists have worked since the 1970s and 1980s to create psychologically sound (or, "God's Truth") grammars, which are performance processes in and of themselves. They disagree with Chomsky's compartmentalization of grammar, in which competent grammar is developed without regard to the existence of a description of how to use it in performance. Instead, these theorists only posit laws, precepts, or tasks that they can immediately connect to a performance process. Let's examine some of the concepts put out by these theorists.

D. Cognitive Grammar

Famous language theorists Ronald Langacker and George Lakoff have put forth theories that take grammar into account when determining what someone knows and can do with language reference. Language cannot be described independently or without a critical reference to cognitive processing and performance functions, similar to Chomsky's competence approach. It is ultimately useless to examine grammatical units without taking into account their semantic significance since grammatical structures do not create an autonomous formal system. Since conceptual structures are part of cognitive processing, linguistic semantics must strive to analyze and explicitly describe them. Our ultimate goal must be to characterize the different categories of cognitive events that make up a particular mental experience.

The aim of the Cognitive theorists thus goes well beyond what is generally considered to be the bounds of Chomsky's grammar. They are concerned, like the Functionalists, about the nature of language and how it relates to thought. For all of these theorists, the organizational directionality of the components of their grammar may be expressed as follows:

Directionality of grammar process for Functionalists and Cognitivism

E. **The Primacy of Speech Comprehension**

   A principal foundation of psychologically valid grammar must lie with the process whereby children acquire language. Basic to this understanding is the relationship between speech comprehension and speech production. To more easily grasp this relationship, we shall begin with a consideration of children who are mute but who do have a hearing. We shall then consider the case of normal children. Since these issues were discussed in detail in Chapter 1, they will only be briefly reviewed here.

Children with No Speech Production Can Comprehend Speech

   None of these persons could speak. Other documented cases are similarly described in that section. These persons were able to comprehend speech despite having no speech capability.

   Conclusion: grammar can develop in the absence of speech production. Persons who are mute but hearing can develop the ability to comprehend speech without their being able to produce speech. Since that is the case, how are such people able to comprehend the sentences that they do? It must be that these mute persons developed a grammar, a mental grammar based on speech comprehension. Such grammar enabled them to comprehend the speech to which they were exposed.

   Speech comprehension precedes and is the basis of speech production: A learner must first hear speech sounds before the person knows what sounds to make. A learner must hear the speech sounds in coordination with the environment or the mind before the person can assign a meaning to the speech sounds.

Speech Comprehension Develops Before Speech Production in Normal Children

   The comprehension and production processes develop in a parallel mode with production always trying to keep up with comprehension. As the child acquires an aspect of language in comprehension, the child can then try to figure out how to use it in production. Thus, the child attempts to coordinate production

concerning the system that has been developed for understanding (Clark and Hecht, 1983).

Speech comprehension necessarily precedes speech production In learning any of the world's languages, children must first be able to comprehend the meaning of the language before they can produce it. Comprehension of language precedes the production of language. Infants can understand words or sentences through receptive language. At one year, babies typically have only a few words, but by 2 years of age, they generally have somewhere between 200 and 500 words.

In God's Truth Comprehension Grammar, which is part of what the first author calls Natural Grammar, speech comprehension performance would look like this schematically:
The performance process of speech comprehension in a Natural Grammar
Sound → Comprehension Grammar → Meaning

F. Inadequacy of Functionalist and Cognitive Grammars

In the context of language acquisition, functionalist and cognitive grammar have been criticized for their inadequacy in accurately describing the process. These approaches typically emphasize the performance aspect of language, specifically speech production. According to these grammars, language processing follows a sequence of components and processes: starting with meaning, moving on to syntax and lexicon, and finally resulting in sound. This can be summarized as Meaning → Grammar → Sound.

However, research and empirical evidence suggest that the primary process for language acquisition, both for typically developing children and those with speech impairments, is speech comprehension. Children primarily learn language by understanding and comprehending speech rather than focusing solely on production.

G. How The Child Learns A Natural Grammar

The Mind of The Child and How It Becomes Prepared For Language Learning

Two main factors influence child growth and development, namely hereditary factors and environmental factors. Humans are creatures created by Allah (God) in the most perfect form compared to others, both physically and spiritually. And from these two aspects, Allah has bestowed basic abilities or potentials that are capable (Daimiah & Niam, 2019). The occurrence of environmental issues can be seen as ethical dilemmas, as they are connected to human actions that determine the quality of a specific environment (Palupi, 2017).

Basic Mental Entities Derived From The Physical World

Mental well-being is shaped by significant life events that have a profound impact on an individual's character and actions. Mental well-being is demonstrated by the ability to adapt successfully or unsuccessfully to psychopathology. This insight is highlighted by the American Psychological Association (APA) (Chatham, 2017).

Children Become Aware of Their Mental World and Strive To Understand It

Mental health is affected by events in life that will have a large impact on a person's personality and behavior. If mental health is disturbed, then mental disorders or mental illness arise. Mental disorders here can change the way a person handles stress because he will continue to experience depression, there can also trigger a desire to hurt himself. Mental disorder according to Aula (2019) is a condition where Individuals feel difficulties with their perceptions of life, where they will have difficulties in establishing relationships with other people, while they also have difficulty in determining attitude to themselves.

H. Conclusion

We have embarked on a journey through the psychological aspects of grammar, language acquisition, and the development of linguistic theories. This chapter has allowed us to delve into the historical discussion surrounding the purpose of linguistics and examine the shifting perspectives of renowned linguist Noam Chomsky, from a non-psychological approach to embracing mentalistic linguistics. We have also explored the explanatory inadequacy of Chomsky's syntax-based grammar and discovered the psychological contradictions within his theorizing.

Moreover, this chapter has taken us deeper into the concept of performance-related grammar, shedding light on the intricate interplay between grammar, meaning, and sound. We have delved into cognitive grammar, which highlights the crucial connection between grammar and cognitive processing, while emphasizing the primacy of speech comprehension in the process of language acquisition. Along the way, we have critically analyzed functionalist and cognitive grammars, pointing out their focus on speech production at the expense of the vital process of comprehension, which is considered fundamental for language acquisition.

Additionally, we have briefly touched upon the factors that influence child growth and development, recognizing the significance of both hereditary and environmental factors. We have acknowledged the impact of significant life events on mental well-being and underscored the importance of understanding our mental world in order to navigate and flourish in our linguistic experiences.

This chapter has provided you, dear reader, with valuable insights into the fascinating realm where psychology intertwines with grammar, language acquisition, and linguistic theories. By exploring these psychological perspectives, we gain a deeper understanding of the intricate nature of language and its connection to the human mind.

REFERENCES

Allen Walker Read. (2019). *Linguistics in North America, 1* (Vol. 10). (W. Bright, Ed.) De Gruyter. doi:https://doi.org/10.1515/9783111418780

Charles, F. H. (2020). *The State of the Art* (Vol. 73). De Gruyter. doi:https://doi.org/10.1515/9783112312926

Cipriani, E. (2021). *On Chomsky's notion of explanatory adequacy*.

Collins, J. (2023). *Internalist priorities in the philosophy of words*.

David , D. Q., & Linda, H. L. (2020). *The Relationship Between Vocabulary Knowledge and Language Proficiency.* (S. Webb, Ed.) United Kingdom: Taylor & Francis.

Diana, I. P., & Antoni, G. (2021). Social Cognition and the Second Person in Human Interaction. In I. P. Diana, & G. Antoni, *Social Cognition and the Second Person in Human Interaction* (p. 194). London: Routledge. doi:https://doi.org/10.4324/9781003133155

Dornyei, & Zoltan. (2019). Psychology and Language Learning: The Past, the Present, and the Future. *Psychology of Language Learning, 1*(1), 27-41.

Fritz, G., Luca , R., & Marco, M. (2019). Vector-Space Models of Semantic Representation From a Cognitive Perspective: A Discussion of Common Misconceptions. *Indexing and metrics, 14*(6). doi:https://doi.org/10.1177/1745691619861372

Ishtiaq, M., Kamal, Z., & Iqbal, S. W. (2022). *Parallel structural patterns in internal linguistic systems of English: an integrated approach*.

James, M. (2019). Form and Formalism in Linguistics. In K. P. Geoffrey, *Formalism, grammatical rules, and Normativity* (p. 197). Berlin: Language Science Press.

John, C., & Georges, R. (2021). *Chomsky and Intentionality.* (A. Nicholas, L. Terje, & R. Georges, Eds.) Wiley. doi:https://doi.org/10.1002/9781119598732.ch31

Leivada, E., & Murphy, E. (2022). *A demonstration of the uncomputability of parametric models*.

Nefdt, R. M. (2023). *Biolinguistics and biological systems: a complex systems analysis of language*.

Nick, R. (2018). *Cognitive linguistics and the public mind: Idealist doctrines, materialist histories* (Vol. 64). ScienceDirect. doi:https://doi.org/10.1016/j.langcom.2018.09.002

Purnomoadjie, W., & Mulyadi, M. (2019). *A Syntactical Analysis on Sentence Structure Used in Two Adeles' Songs*.

Rod, B., & Richard, R. (2020). *Language Education in a Changing World: Challenges and Opportunities* (Vol. New Perspectives on Language and Education; Volume 79). Multilingual Matters. doi:https://doi.org/10.21832/9781788927864

Ryan, M. N. (2019). The philosophy of linguistics: Scientific underpinnings and methodological disputes. *Philosophy Compass*. doi:https://doi.org/10.1111/phc3.12636

Sharma, M. P. (2022). *An Inquiry into Universal Grammar*.

Steven, P. (2023). Modern language models refute Chomsky's approach to language.

Tasawar, A., & Hafiz , G. Y. (2022). A CRITICAL REVIEW ON UNIVERSAL GRAMMAR OF CHOMSKY IN LEARNING A. *2*, 190-198. doi:https://doi.org/10.53754/iscs.v2i2.465

Ulrike, M. L., & Hanna, E. (2023). *Linguistic Feeling: A Relational Approach Incorporating Epistemology, Theories of Language, and Human-Machine Interaction*.

Yufrizal, H. (2023). *An Introduction To Second Language Acquisition*.

UNIT 12

BIOLOGICAL FOUNDATION OF LANGUAGE NEUROSCIENCE (BRAIN SPECIALIZATION)

Introduction

Language is a remarkable and defining characteristic of human communication. From the simplest conversations to the most complex narratives, language allows us to express thoughts, emotions, and ideas. But have you ever wondered how our brains enable us to understand and produce language?

Welcome to the chapter on the biological foundation of language and its relationship to neuroscience, with a particular emphasis on brain specialization. Language is a distinct and complicated cognitive function that distinguishes humans from other species. It is a critical component of our communication, social interactions, and cognitive development. In this chapter, we'll look at the intriguing topic of neuroscience and how it helps us understand language. We will examine the complicated workings of the human brain and how different regions and networks are involved in language generation and comprehension.

This chapter explores a range of topics on the biological foundation of language. The brain, known as the source of all linguistic creativity, is the focus of this section. After reading this chapter, readers should understand why, despite differences in each language that has been established, the brain serves as the beginning point for all existing languages and is critical to the process of establishing the language that every human being uses. Not only that, but this chapter will also present some thoughts about the relationship between the brain and the nervous system in the

process of language creation and other factors that directly or indirectly affect language itself.

A. What is the Biological Foundation of Language?

The biological foundation of language explores the problematic dating among human biology and the development of linguistic skills. This newsletter provides an in-depth examination of the key elements of the physiological foundation of language, such as cognitive systems and functions, genetic predispositions, and evolutionary views. By means of inspecting various scientific studies and theories, we intend to clarify the critical function that biology plays in the purchase, processing, and expression of language in people. (Arbib, 2017), the debate over language foundations has been intense. We make the following suggestions based on a review of recent findings concerning the study of language acquisition and evolution:

1. Language biological predispositions are mostly domain-general and not necessarily language-specific or unique to humans.

2. Language's sociocultural environment is another important foundation, helping to shape language components, induce, and promote language transition.

3. Language and the cognitive machinery must have coevolved.

Language is a uniquely human trait, enabling communique, cognition, and cultural transmission. The biological foundation of language seeks to resolve the mechanisms that underlie this excellent capability. This segment offers a creation of the significance of investigating the organic factors of language and descriptions in the subsequent sections of this newsletter.

The biological foundation of language encompasses the neurobiological underpinnings, genetic predispositions, and evolutionary views that form human language capabilities. The biological basis of linguistic knowledge provides useful insights into language development, difficulties, and evolution. Similarly, interdisciplinary research is essential for understanding the complexity of this intriguing topic.

1. The Human Brain

The human brain is a complex organ liable for an array of cognitive procedures, sensory belief, motor control, and emotional studies. this text provides a comprehensive explanation of the structure and features of the human mind, highlighting its diverse areas and their respective roles. with the aid of inspecting applicable medical studies and studies, we goal to provide insights into the top-notch capabilities and intricacies of the human brain. The human brain is the control middle of the imperative worried machine, responsible for coordinating and regulating numerous physical capabilities.

(Bhushan, Ravichandiran, & Kumar, 2022)The central nervous system, or CNS, is made up of the spinal cord that emerges from the brain. The brain is around 60% fat and weighs about 3 pounds in a typical adult. Combinations of water, protein, carbs, and salts make up the remaining 40%. The brain is not a muscle in and of itself. It is made up of nerves, blood vessels, neurons, and glial cells.

There are two distinct parts of the central nervous system: gray matter and white matter. Gray matter in the brain refers to the thicker, outer layer, and white matter to the thinner, inner layer beneath. This arrangement is reversed in the spinal cord, where the gray matter is located within and the white matter is on the outside.

Picture 1 : : https://www.hopkinsmedicine.org/health/conditions-and-diseases/anatomy-of-the-brain

Picture 2 : https://www.hopkinsmedicine.org/health/conditions-and-diseases/anatomy-of-the brain
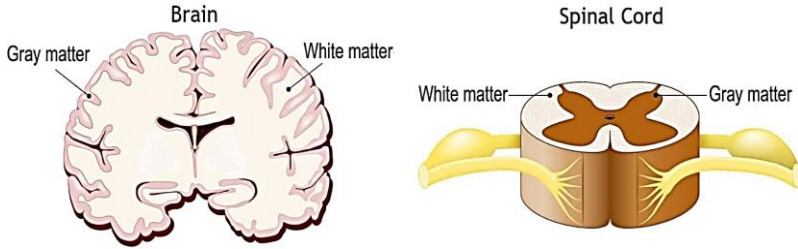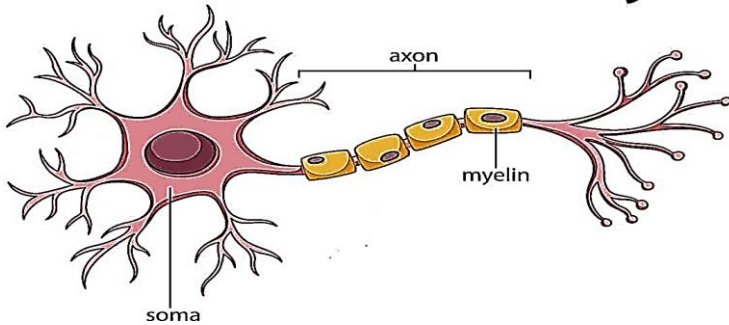
The bulk of white matter is made up of axons, which are the long stems that connect neurons and are covered with myelin, while the majority of gray matter is made up of neuron somas, which are the circular core cell bodies. Because of changes in the composition of the neuron components, the two appear as distinct

Each region has a certain purpose. White matter delivers information to different parts of the nervous system, while gray matter processes and interprets it. The human brain is a remarkably complicated organ that governs a extensive range of features critical to human cognition, conduct, and basic nicely-being. Knowledge, in its various forms and functions, is essential for deciphering the mysteries of the mind. Ongoing studies keeps to shed light at the intricacies of the human mind and its significance for human revel in.

a. The Functions of Brain

The five senses provide information to the brain. See, smell, hear, feel, and taste are all senses. The brain also gets impulses from other regions of the body, such as touch, vibration, pain, and temperature, as well as autonomic (involuntary) inputs from organs. You can use this data to comprehend and make sense of what is going on around you.

Your brain enables:

1) Ideas and decisions.
2) Emotions and memories.
3) Motor function (movement), balance, and coordination.
4) Perception of different feelings, including pain.
5) Breathing, heart rate, sleep, and temperature management are examples of automatic behavior.
6) Controlling organ function.
7) Language and speech functions.
8) Fight or flight reaction (stress reaction).

1) Sensory Processing: This subsection discusses how the mind processes and translates sensory records from the environment, which include imaginative and prescient, listening to, contact, flavor, and odor.
2) Motor control: We delve into the mind's function in motor manipulate, which include voluntary actions and coordination.
3) Reminiscence and getting to know: This phase specializes in the mind's involvement in memory formation, storage, and retrieval, in addition to the strategies of getting to know and talent acquisition.

2. **Brain Work**

Throughout the body, the brain transmits and receives electrical and chemical messages. Your brain decodes each signal to control a certain process. For instance, some make you feel fatigued while others make you feel discomfort. Some messages are retained in the brain, while others are delivered to distant extremities via the spine and the vast network of nerves that runs throughout the body. The central nervous system's billions of neurons (nerve cells) are necessary for this to happen.

a. **The Brain Structure**

The brain is analogous to a community of experts. All areas of the brain collaborate, but each has a distinct function. The brain he can be divided into three basic units. The forebrain, midbrain, and hindbrain. The hindbrain contains the upper part of the spinal cord, the brainstem, and intertwined spheres of tissue called the cerebellum. The hindbrain controls vital functions of the body such as
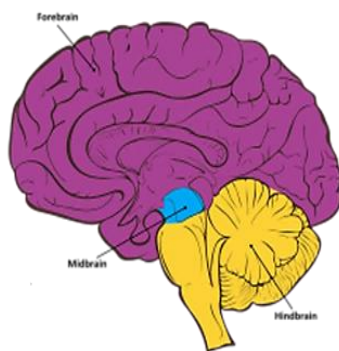
breathing and heart rate. The cerebellum coordinates movement and participates in learned everyday movements. Playing the piano or hitting a tennis ball activates the cerebellum.
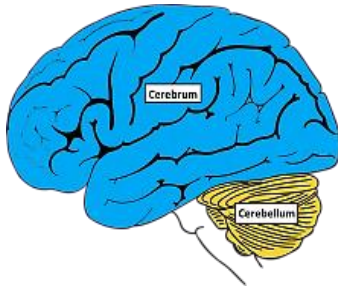
The midbrain is located in the upper section of the brainstem and is part of the circuitry that controls some reflex processes as well as controlling eye movements and other voluntary motions. The forebrain is the most developed and largest region of the human brain. It mostly comprises of the cerebrum and accompanying tissues (see "inner brain"). People frequently think of the cerebrum when they see photos of the brain. The cerebrum is the source of intellectual activity and is found in the upper region of the brain. It helps you remember things and allows you to plan, imagine, and ponder. Friends may be recognized, books can be read, and games can be played.

The cerebrum's two parts are separated by a profound fissure. Despite the division, the two brain hemispheres communicate with one another because to a dense network of nerve fibers that runs along the fissure's bottom. Despite their appearance as mirror reflections, the two hemispheres are distinct. For example, whereas the left hemisphere appears to be in charge of word production,
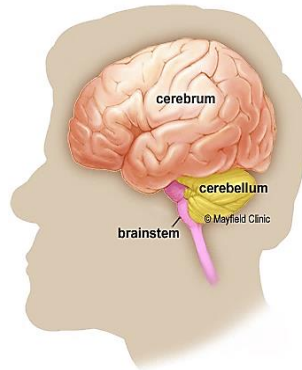
the right hemisphere appears to be in control of many aspects of abstract reasoning.

For an unknown reason, the bulk of brain-to-body impulses and those from the body to the brain overlap. This means that the left side of the body is primarily controlled by the left cerebral hemisphere, whereas the right side is primarily controlled by the right cerebral hemisphere. When one side of the brain is affected, the opposite side of the body suffers. For example, a stroke in the right hemisphere of the brain can paralyze the left arm and leg. The brainstem relays information from the cerebrum and cerebellum to the spinal cord.. Many of its automatic processes—including breathing, heart rate, body temperature, wake and sleep cycles, digestion, sneezing, coughing, vomiting, and swallowing—are performed by the brain.

CEREBRUM

The cerebrum, or front of the brain, is made up of gray matter (the cerebral cortex) and white matter. The cerebrum, the brain's largest component, regulates temperature as well as starting and coordinating movement. Different parts of the cerebrum enable speech, judgment, thinking and reasoning, problem-solving, emotions, and learning. Other functions are concerned with the senses of sight, sound, touch, and so on.

CEREBELLUM

The cerebellum, also known as the "little brain," is a fist-sized region of the brain located behind the ear, above the brainstem and below the temporal and occipital lobes. It, like the cerebral cortex, has two hemispheres. The inner region is linked to the cerebral cortex, whereas the outside region contains neurons. It is responsible for maintaining posture, balance, and equilibrium while coordinating voluntary muscle movements. Recent research has focused on the cerebellum's functions in intellect, emotion, and social interaction, as well as its possible roles in addiction, autism, and schizophrenia.

BRAINSTEM

The brainstem, located in the center of the brain, connects the cerebrum and spinal cord. The brainstem includes the midbrain, pons, and medulla. The spinal cord exits the medulla through a large opening near the base of the skull. The vertebrae support the spinal cord, which transmits and receives messages between the brain and the rest of the body.

b. **The Inner of the Brain**

Deep within the brain, structures that act as barriers between the spinal cord and the cerebral hemispheres are hidden. These structures, in addition to assessing our emotional state, alter our perceptions and behaviors in accordance with that condition and allow us to execute automatic motions. The structures described below, like the lobes in the cerebral hemispheres, are paired and identical in the other half of the brain.
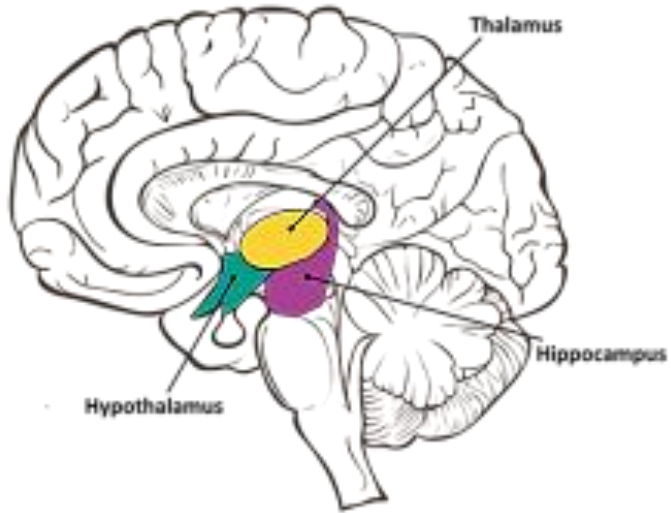
The hypothalamus, which is around the size of a pearl, governs a number of vital activities. It helps you get out of bed in the morning and raises your blood pressure before a test or job interview. The hypothalamus is a critical emotional organ because it regulates the molecules that make you happy, angry, or sad. The thalamus, which is located near the hypothalamus, is an important communication link between the spinal cord and the cerebrum.

An arching tract of nerve cells connects the hippocampus to the thalamus and hypothalamus. This little protrusion acts as a memory indexer, transporting memories to the appropriate hemisphere of the brain for long-term storage and retrieval as needed. The thalamus is bordered by the basal ganglia, a collection of nerve cells (not shown). They are in charge of starting and completing movements. Parkinson's disease affects the nerve cells that enter the basal ganglia and causes tremors, rigidity, and a stiff, shuffling gait.

c. Neural Networks and Connectivity

The Neuron come in a variety of sizes and shapes, yet all are variations on the same theme. Neurons transmit data. They accomplish this using a combination of chemical and electrical signaling mechanisms: chemical messengers are often employed to transmit information across neurons, whereas electrical signals are utilized to quickly transfer information from one portion of a neuron to another.
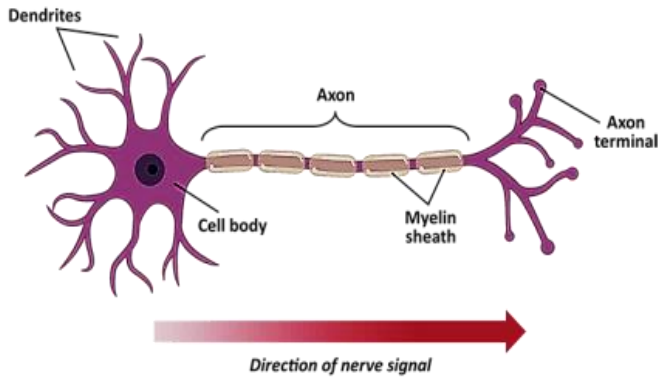
The neuron is the primary functional unit of the nervous system, which comprises the brain, the remainder of the nervous system, and a variety of other cell types. Neuronal signals that flow through them produce all feelings, movements, thoughts, memories, and experiences. Every neuron has a cell body, also known as a soma, which supports the remainder of the neuron's demands for metabolism and synthesis. Dendrites are a type of branching, tapering mechanism found in the majority of neurons. They have long cylindrical processes called axons that transport information away from the cell body and junctions called synapses where they receive information from other neurons. The cell body, dendrites, and axon are the three components that make up a neuron.

The nucleus, which is part of the cell body, produces the majority of the chemicals that the neuron requires to survive and function. Dendrites, like tree

branches, stretch from the cell body and receive impulses from surrounding nerve cells. Signals from dendrites may continue on an axon to another neuron, a muscle cell, or cells in another organ after passing through the cell body. A neuron is typically surrounded by a swarm of support cells. By enveloping the axon, some cell types produce an insulating myelin coating. Myelin, a fatty substance, insulates the axon and aids in the faster and longer transmission of nerve information. Axons can be extremely short, such as those that transmit signals between cortical cells over less than a hair's diameter. The axons that transport signals from the brain to the spinal cord may also be extremely long.

d. **The Synapse**

Scientists have learned a lot about neurons by studying the synapse—the place where a signal flows from the neuron to another cell. The signal causes tiny vesicles to be released near the axon's end. Neurotransmitters, which are molecules, are released into the synapse by these structures. After crossing the synapse, neurotransmitters bind to receptors on surrounding cells. These receptors have the ability to change the properties of the receiving cell. If the receiving cell is likewise a neuron, the signal can continue to the next cell.
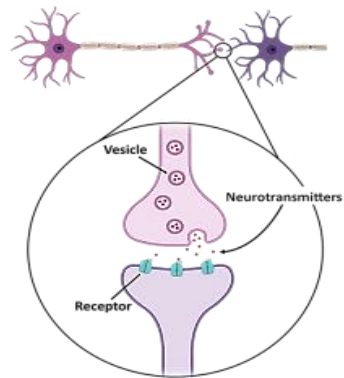
NEURONS	SYNAPSES
This phase explains the essential constructing blocks of the brain, neurons, and their function in transmitting electrical and chemical signals.	We talk synapses, the junctions among neurons, wherein records is transmitted through the release and reception of neurotransmitters.

NEURAL NETWORKS

Right here, we discover the interconnectedness of neurons, forming neural networks that underlie numerous cognitive tactics and behaviors.

e. **Lobes of the Brain**
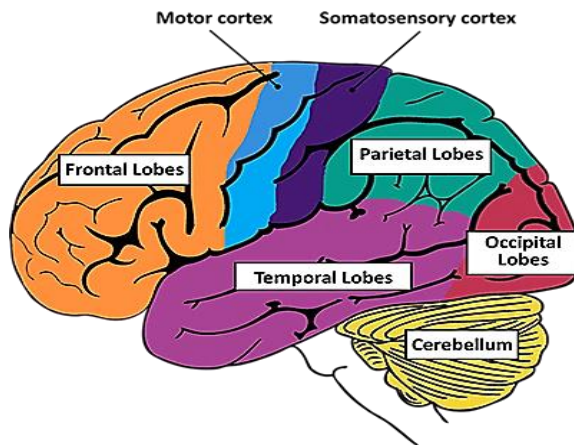
Each hemisphere of the brain can be divided into portions or lobes, each dedicated to a different function. To understand each lobe and its characteristics, let's look at the cerebral hemispheres.

FRONTAL LOBES

The two frontal lobes are placed behind the brow. These two leaves do a lot of the work when it comes to planning schedules, imagining the future, and using logical arguments. One of the ways the frontal lobe accomplishes these tasks is by functioning as a short-term memory location that allows you to keep one idea in mind while considering other ideas. Frontal Lobe; we delve into the frontal lobe, liable for executive features, choice-making, motor manage, and character.

MOTOR CORTEX

A motor cortex is located at the back of each frontal lobe and helps with the planning, management, and execution of voluntary movements such as raising an arm or kicking a ball.

SEMATONSENSORY CORTEX

The somatosensory cortex is located near the front of these lobes, just after the motor regions. The rest of the body sends these regions information regarding movement, taste, temperature, and touch..

When you consume a wonderful meal, two areas of the brain behind the frontal lobe, known as the parietal lobe, are activated: the flavor, aroma, and texture of the food. Reading and math are also part of each parietal lobe's repertory. The parietal lobe, which is involved in sensory perception, spatial awareness, and attention, is described in this section.

PARIETAL LOBES
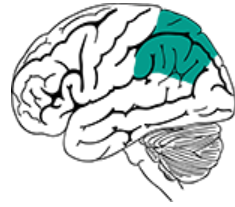
OCCIPITAL LOBES

When you look at the content and graphics on this website, two areas of your brain are active. The occipital lobes, which process visual information, associate it with memories of previously seen images. Occipital lobe injury can lead to blindness. Occipital Lobe; we focus on the occipital lobe, which is responsible for visual processing and interpretation.

The temporal lobes complete our journey of the cerebral hemispheres. They nest beneath the parietal and frontal lobes, in front of the visual regions. Your brain responds to music by stimulating these lobes, whether you choose classical or rock. An region at the top of each temporal lobe receives input from the ears. The bottom of each temporal lobe is crucial for memory production and recovery, particularly for musical memories. Memory appears to be linked to the sensations of touch, sight, hearing, and taste in other parts of this lobe. The temporal lobe, which is vital in auditory processing, language comprehension, and memory, is revealed.

TEMPORAL LOBES

B. How Human Get Energy for Learning

Energy for learning refers back to the physical, mental, and emotional sources required to interact in powerful getting to know. This idea emphasizes the importance of managing and optimizing one's energy ranges to beautify studying effects. This article offers a top level view of strength for getting to know, exploring the diverse dimensions of power and their impact on the getting to know manner. Through understanding the connection between electricity and learning, novices and educators can undertake strategies to sell most excellent energy control and create conducive learning environments. Strength for mastering acknowledges the crucial function of power inside the gaining knowledge of manner. This segment introduces the idea and outlines the following sections of this article.

1. **Dimensions of Strenght for Learning**
   a. Bodily strength : bodily energy refers to the extent of bodily well-being and power, together with factors such as sleep, nutrients, workout, and basic fitness. Ok physical energy supports alertness, attention, and standard cognitive functioning.
   b. Mental energy : intellectual strength pertains to the cognitive assets and intellectual stamina required for powerful getting to know. It encompasses elements such as focus, interest, reminiscence, hassle-fixing, and mental flexibility.
   c. Emotional electricity : emotional strength encompasses the emotional nicely-being and resilience necessary for premiere getting to know. It includes handling feelings, cultivating a positive mindset, and creating a supportive gaining knowledge of surroundings.

2. **The Impact of Energy on Learning**
   a. Engagement and Motivation : most effective strength ranges facilitate elevated engagement, motivation, and energetic participation within the getting to know technique. When energy levels are low, learners might also battle to stay centered and encouraged.
   b. Data Processing and Retention : strength availability affects cognitive strategies which include statistics processing, memory encoding, and retrieval. Sustaining most advantageous strength ranges helps efficient mastering and knowledge retention.
   c. Properly-being and mastering effects : keeping balanced energy ranges definitely influences basic well-being, decreasing pressure levels and improving overall getting to know results.

3. **Strategies for Optimizing Strength for Gaining Knowledge**
    a. Bodily nicely-being : strategies which include normal workout, ok sleep, and a balanced weight loss program contribute to foremost physical strength ranges for gaining knowledge of.
    b. Cognitive Practices : strategies like mindfulness, purpose-placing, and self-law help manage intellectual energy, selling awareness, attention, and intellectual clarity.
    c. Emotional help : developing a effective and supportive mastering environment, fostering emotional nicely-being, and inspiring self-mirrored image can decorate emotional energy for studying.

Energy for getting to know is a multifaceted idea that acknowledges the significance of managing physical, intellectual, and emotional energy inside the mastering manner. Via information and optimizing power ranges, beginners can beautify their engagement, cognitive tactics, and typical properly-being, leading to more powerful and exciting studying experiences.

C. **Where Do Learning Begins**

In which getting to know starts refers to the essential factors and environments that lay the foundation for effective learning. This concept highlights the importance of knowledge the preliminary stages of the learning technique and growing conducive gaining knowledge of environments. This article affords an outline of wherein mastering begins, inspecting the key factors that make contributions to successful learning initiation. Through exploring the essential factors of wherein

studying starts, educators and newbies can optimize the studying revel in and promote lifelong gaining knowledge of.

Where getting to know begins acknowledges the vital elements and contexts that shape the preliminary tiers of the gaining knowledge of method. Knowledge wherein studying begins presents valuable insights into the foundational factors and environments that set the stage for powerful studying. Via embracing curiosity, motivation, earlier understanding, engagement, and creating conducive learning environments, educators can optimize the getting to know experience, sell deep know-how, and nurture a lifelong love for getting to know.

D. How do We learn?

How can we learn? This question delves into the mechanisms and methods that underlie human mastering. This text gives an outline of the mastering technique, analyzing the key components and elements that contribute to effective getting to know. By understanding how we study, educators and inexperienced persons can rent techniques and strategies that optimize the studying enjoy. Drawing on studies and theories within the discipline of training, this text sheds mild at the multifaceted nature of the learning manner.

How will we research? This question prompts an exploration into the difficult method of acquiring expertise and abilities. This segment introduces the topic and descriptions the subsequent sections of this text.

Knowledge how we examine provides precious insights into the intricacies of the gaining knowledge of process. By spotting the important thing additives, elements, and theories that impact studying, educators and learners can rent powerful strategies to decorate the gaining knowledge of enjoy and sell significant and lifelong getting to know.

E. Learning and Behaviour

Learning and behavior are carefully interconnected elements of human improvement and version. This newsletter explores the relationship among gaining knowledge of approaches and observable conduct, losing mild on how obtained know-how and reviews shape behavioral responses. It examines key theories and principles of studying, and their have an impact on on conduct. Expertise the relationship among getting to know and behavior gives precious insights for educators, psychologists, and people looking for to apprehend and alter conduct efficiently.

Mastering and conduct are essential components of human development. This phase introduces the topic and descriptions the subsequent sections of this newsletter.The relationship among getting to know and behavior underscores the significance of information how experiences, reinforcement, and remark form observable behavior. By using applying theories of mastering and conduct, educators and psychologists can layout powerful interventions to facilitate superb behavioral alternate.

F. Summary
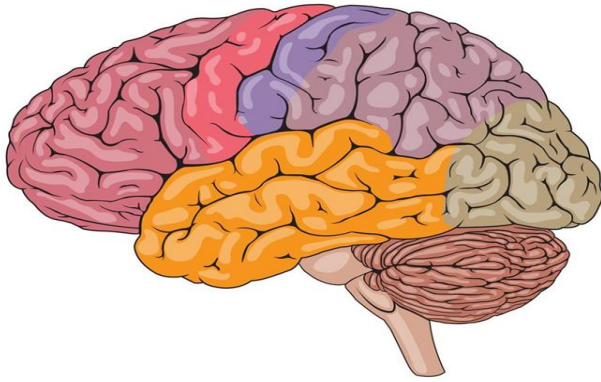
Name of each of the Lobes of human Brain and explain it.

After you learn the material, write down your own summary with your own understanding about the material. Do it as your creativity.

G. Assement/Evaluation

Library Genre Word Search

Look for the words listed below.

N	R	N	F	R	O	N	T	A	L	O	B	E	S	W	S	U	P	E	C
E	C	E	J	S	V	A	A	H	G	T	Z	K	B	N	H	M	A	Q	C
U	C	E	R	E	B	E	L	L	U	M	Z	P	O	G	M	V	R	I	G
R	J	L	R	L	C	F	P	J	D	C	D	R	N	Z	A	X	I	R	B
A	D	Q	V	E	I	X	Z	S	V	C	U	L	E	D	N	W	E	J	I
L	T	W	S	I	B	S	U	S	H	E	Q	X	Q	F	G	J	T	S	O
N	C	A	D	V	E	R	T	U	N	E	Z	M	O	A	A	W	A	C	L
E	F	H	Q	B	Y	F	U	I	D	C	Y	Y	H	T	V	E	L	I	O
T	V	F	Y	X	I	I	Y	M	C	Q	S	M	S	U	J	M	L	E	G
W	D	Y	J	R	W	D	X	O	G	F	K	Y	P	H	M	U	O	N	I
O	B	R	A	I	N	S	T	E	M	K	I	L	N	F	J	O	B	C	C
R	R	L	R	W	S	L	L	J	S	W	M	C	M	A	G	J	E	E	A
K	A	A	M	H	U	M	A	N	X	Z	K	Y	T	Q	P	L	S	F	L
S	I	S	H	Q	D	E	O	V	V	H	J	N	X	I	L	S	M	I	Y
A	N	S	W	U	N	C	R	R	V	E	J	J	T	1	O	H	E	C	S
G	N	I	X	U	O	C	C	I	P	I	T	A	L	L	O	B	E	S	T
E	V	C	X	R	Z	B	A	Z	V	S	Y	C	T	X	L	X	D	I	E
K	P	S	L	A	N	G	U	A	G	E	Q	W	K	Y	R	V	R	O	R
Q	W	G	R	T	G	C	L	K	Z	F	A	N	T	A	S	Y	B	N	Y
X	Y	O	T	E	M	P	O	R	A	L	L	O	B	E	S	F	W	F	U

Cerebrum	Frontal Lobes	Neurons	Language
Cerebellum	Temporal Lobes	Synapses	Biological
Brainstem	Parietal Lobes	Neural Networks	
Brain	Occipital Lobes	Human	

Guess the given answer. If the box with the answer you may line/highlight the correct answer, but if the box is empty you may write down the answer.

The front of the brain is made up of gray and white matter. This is the brain's largest component, controlling temperature as well as starting and coordinating movement.

Cerebrum

Cerebellum

Brainstem

A deep fissure divides the planet into two parts (hemispheres). The two hemispheres communicate with each other via a dense network of nerve fibers at the base of this fissure. Although the two hemispheres appear to be mirror images of one another, they are not..

Cerebellum

Cerebrum

1.

2.

3.

What are the 3 inner brain of human?

This phase explains the essential constructing blocks of the brain, and their function in transmitting electrical and chemical signals.

Neuron

Synapses

Formative Test

Answer the question below. Answer it in your own paper with your own understanding of each. This test as a mesurement of your understanding towards this material.

1. What do you know about human brain?

   _____

   _____

   _____

   _____

   _____

2. What is the function of brain?

   _____

   _____

   _____

   _____

   _____

3. How do human learn?

   _____

   _____

   _____

   _____

   _____

4. How human getting smarter?

   _____

   _____

   _____

   _____

   _____

5. What is Neural Networks and Connectivity?

_____

_____

_____

_____

_____

Last Evaluation

(Onto the other pages is Glossarium. Teacher must make a group of students, and the groups asking the other groups about those words. If the group didn't know, the other groups could answer the questions and they got the point. (playing a words game))

REFERENCES

Baildon, M., & Damico, J. S. (2016). Taking sides in classroom discourse: Perspectives on critical literacy. Language and Education, 30(5), 405-420.

Bear, M. F., Connors, B. W., & Paradiso, M. A. (2016). Neuroscience: Exploring the Brain (4th ed.). Wolters Kluwer.

"Brain Rules for Aging Well: 10 Principles for Staying Vital, Happy, and Sharp" by John Medina explores the science behind brain function and aging.

Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2017). How People Learn: Brain, Mind, Experience, and School: Expanded Edition. National Academies Press.

Brockmeyer, S., & D'Angiulli, A. (2016). How air pollution alters brain development: The role of Neuroinflammation. *Translational Neuroscience*, *7*(1), 24–30. https://doi.org/10.1515/tnsci-2016-0005

Domjan, M. (2018). The Principles of Learning and Behavior (7th ed.). Cengage Learning.

Evans, V., & Whittaker, R. (2019). Taking sides in language learning. ELT Journal, 73(3), 332-339.

Herbet, G., & Duffau, H. (2020). Revisiting the functional anatomy of the human brain: Toward a meta-networking theory of cerebral functions. *Physiological Reviews*, *100*(3), 1181–1228. https://doi.org/10.1152/physrev.00033.2019

Hidi, S., & Renninger, K. A. (2016). The four-phase model of interest development. Educational Psychologist, 41(2), 111-127

Jensen, E. (2005). *Teaching with the brain in mind.* ASCD

Medina, J. (2010). Brain Rules for Aging Well: 10 Principles for Staying Vital, Happy, and Sharp. Pear Press.

Nicolini, C., & Bifone, A. (2016). Modular structure of brain functional networks: Breaking the resolution limit by surprise. *Scientific Reports*, *6*(1), 1–13. https://doi.org/10.1038/srep19250

"The Principles of Learning and Behavior" by Michael Domjan is a comprehensive textbook that explores the principles, theories, and applications of learning and behavior.

Vanderah, T. W., & Gould, D. J. (2021a). *Nolte's the human brain: An introduction to its functional anatomy*. Elsevier.

Wang, Y., Pan, Y., & Li, H. (2020). What is Brain Health and why is it important? *BMJ*, m3683. https://doi.org/10.1136/bmj.m3683

Watkins, K. E., & Rice, M. L. (2011). Specific language impairments in children. Current Opinion.

UNIT
13

HOW TREAT AND STRESS AFFECTING IN LEARNING

Learning Objective :

1. Students can understand more about how stress and threat affect student performance in learning
2. Explore how stress and threat can impair higher-order cognitive abilities, such as critical thinking, creativity, and problem-solving skills.
3. Students can find out how they can reduce stress in learning.

Material Description :

1. Stress and Learning
2. Threat and Learning
3. Learned Helplessnes
4. Practical Suggestions (solutions for students to reducing stress in learning)

A. Stress and Learning

Both for students and teachers, stressful situations occur often in educational environments. There is a lot of pressure to perform since there are so many tests, assessments, and deadlines (Gonzalez, Peters, & Orange, 2016). However, the learning and memory processes that are the foundation of our educational system can be severely harmed by this stress. Stress related changes in learning and memory are hypothesized to contribute to stress related mental illnesses like major depressive disorder or post-traumatic stress disorder in addition to their

importance in educational situations (Bryant, 2019). To learn more about how stress impacts memory and learning, several research have been carried out (Gagnon & Wagner, 2016). Although the effects of stress were shown to be complicated, depending on the precise memory process or stage that was affected by stress and the activity profile of main physiological stress response systems, stress was found to have both enhancing and hindering effects on memory.

Stress and learning are two interconnected aspects of human life that can significantly influence each other (Hori & Kim, 2019). While stress is often perceived as a negative experience, it is important to recognize that a certain level of stress can be beneficial and enhance learning. However, excessive or chronic stress can hinder the learning process and have detrimental effects on academic performance and overall well-being (Carnicer, Calderón, & C, 2019). This article aims to explore the relationship between stress and learning, shed light on its impact, and provide effective strategies to manage stress and optimize learning outcomes.

Stress is a feeling of emotional or physical tension. It can come from any event or thought that makes you feel frustrated, angry, or nervous. Stress is your body's reaction to a challenge or demand. Our adrenal glands release a protein called cortisol when we experience stress. No matter the threat physical, environmental, academic, or emotional our body reacts by producing cortisol. This sets off a series of physiological responses, including immune system depression, tensing of the big muscles, blood clotting, and raised blood pressure. It is the ideal reaction to the sudden appearance of a saber-toothed tiger. But in a classroom, that type of reaction causes issues. Chronically high cortisol levels cause the hippocampus, which is essential for the development of explicit memories, to lose brain cells. (Fink, 2016)

Experiencing stress causes profound physical changes. Robert Sapolsky of Stanford University discovered that Vietnam soldiers with PTSD (post-traumatic stress disorder) had

hippocampal atrophy rates that were 8 to 24 percent higher than those of the control group. Students' capacity to distinguish between what is vital and what is not is also hampered by ongoing stress. shows that thinking and memory are impacted by stress; the brain's short- and long-term memory formation abilities are reduced. Another issue exists. Students who experience ongoing stress are more likely to get sick. One study found that pupils' immune systems were lowered during exam times and that they produced less of the critical antibodies needed to combat illness. This may shed light on the vicious circle of academia: More illnesses caused by test anxiety, which leads to bad health and missed lessons.

Stress has a significant influence on a person's learning process. When a person experiences high levels of stress, both acutely and chronically, it can affect the cognitive, emotional, and physical abilities required in learning. Here are some of the effects stresses has on learning:

1. Difficulty in Concentration: High levels of stress can interfere with a person's ability to concentrate well. Distracted thoughts and disturbing feelings can make it difficult to focus on the learning material, resulting in low comprehension and recollection of information.

2. Memory Impairment: Stress can affect memory function, especially in the formation and retrieval of new information. Stress hormones, such as cortisol, can interfere with the process of memory consolidation and reduce a person's ability to recall information that has been learned.

3. Decreased Motivation: Excessive stress can cause a decrease in motivation in the learning process. Feelings of overwhelm, fatigue, and lack of interest can reduce the desire to learn and actively follow the learning process.

4. Decreased Academic Performance: Uncontrolled stress can have a negative impact on academic performance. Difficulties in studying, facing tasks effectively, and facing exams can hinder a person's ability to achieve optimal results.

5. Negative Emotional Influence: High stress can trigger negative emotions, such as anxiety, worry, and frustration. These emotions can disrupt the emotional stability needed to learn well.

B. Threat and Learning

The impact of stress and threat on learning is profound and can significantly affect the brain's ability to process information and retain knowledge. When the brain is under stress, it triggers the sympathetic nervous system, activating the "fight or flight" response. This response releases hormones like cortisol and adrenaline, increasing heart rate, blood pressure, and breathing. While this response can be helpful in short-term situations, chronic stress and anxiety can hinder the brain's capacity to learn and absorb new information. Studies indicate that stress and anxiety can impair working memory, attention, and executive function, which are all crucial for effective learning.

Moreover, stress and anxiety can have emotional and motivational repercussions on learning. Students experiencing high levels of stress and anxiety may exhibit reduced engagement, motivation, and participation in class, further impeding their learning process. To mitigate the negative effects of stress and anxiety on learning, it is vital for educators to create a supportive and safe learning environment that fosters a sense of security and motivation among students. This can involve building positive relationships with students, providing clear instructions and expectations, and implementing techniques like mindfulness and relaxation to alleviate stress and anxiety.

It's important to recognize that individuals have varying responses to potential threats. Some perceive them as challenges and respond actively, while others may ignore them. For some, threats can be overwhelming. However, the brain exhibits predictable reactions to danger. The amygdala plays a central role in fear and threat responses, directing attention and receiving input from various brain regions. Neural projections

from the amygdala activate the sympathetic system, leading to the release of stress hormones like cortisol, vasopressin, and adrenaline. These neurochemicals swiftly influence our thoughts, emotions, and behaviors. Recent research suggests that threatening environments can cause chemical imbalances, particularly affecting serotonin, which regulates emotions and behaviors. Lower serotonin levels have been associated with increased aggression and lifelong patterns of violent behavior, especially in individuals exposed to threat and stress from an early age, particularly in violent family settings. These individuals have adapted their brain receptor sites to prioritize survival-oriented behaviors, posing challenges for teachers in addressing these behaviors despite understanding their underlying causes.

Students face various threats in their daily lives, such as threats at home, during their commute to school, in hallways, and within the classroom. These threats can arise from stressed parents resorting to violence, loss of privileges, relationship conflicts, or bullying. In the classroom, threats may manifest as rude peers or unaware teachers who humiliate, impose detention, or cause public embarrassment. The brain can respond attentively to any of these events and more. While these threats trigger defensive reactions that aid survival, they are detrimental to learning. However, these defensive reactions come at a cost. The brain prioritizes survival over complex problem-solving and pattern recognition. Students become less adept at recognizing connections and higher levels of organization. This has significant implications for education, as the emphasis shifts toward memorizing isolated facts. Conversely, learners experiencing lower stress levels are better equipped to establish connections, comprehend underlying theories, and integrate a broader range of information. To optimize learning, it is crucial to establish an environment free from stress, threats, and induced helplessness for learners.

The amygdala plays a vital role in our responses to fear and threats (LeDoux, 1996). It directs our attention and receives inputs from various brain regions, including the thalamus, sensory cortex, hippocampus, and frontal lobes. Typically, it triggers the release of adrenaline, vasopressin, and cortisol, which swiftly impact our thoughts, emotions, and behaviors. Serotonin acts as a crucial regulator of our emotions and subsequent actions. Decreased serotonin levels often correlate with increased violence, potentially leading to impulsive and aggressive behavior that persists throughout a person's life. Individuals who come from violent backgrounds may struggle to attract attention.

Threats can manifest in different aspects of a student's life, such as their home, commute, hallways, and classrooms. They may come in the form of a disrespectful classmate or an unaware teacher who threatens a student with humiliation, detention, or embarrassment among their peers. When students experience high levels of stress, their ability to understand connections and perceive larger patterns diminishes. Consequently, the learning process becomes centered around memorizing isolated facts. Conversely, learners who face lower levels of stress are more adept at establishing connections, comprehending underlying theories, and integrating a wider range of information.

C. Learned Helplessness

Learned helplessness is a psychological concept that refers to a state of passive behavior or inaction that arises when an individual perceives that they have no control over their circumstances, even when control is actually possible (Maier & Seligman, 2016). It was first described by psychologist Martin Seligman in the 1960s during his experiments with dogs. In his experiments, Seligman exposed dogs to unavoidable electric shocks. Later, when given the opportunity to escape the shocks by jumping over a barrier, the dogs failed to do so, even though they were physically capable. They had learned to be helpless in the face of adversity.

The concept of learned helplessness has since been extended to human behavior (Maier & Seligman, 2016). It suggests that individuals who experience repeated negative events or perceive a lack of control over their lives may develop a belief that their actions will not lead to desirable outcomes. This belief can lead to a state of helplessness, where they become passive and fail to take action even when opportunities for change or improvement are present.

Learned helplessness can have significant consequences for mental health and overall well-being (Fabio, Saklofske, & Stough, 2020). It can contribute to feelings of depression, anxiety, and a diminished sense of self-efficacy. Individuals who feel helpless may also be less likely to seek help, make efforts to improve their situation, or take risks to achieve their goals. However, it is important to note that learned helplessness is not an inherent or permanent characteristic (Burland, et al., 2019). With appropriate interventions, such as cognitive-behavioral therapy or empowerment programs, individuals can learn to challenge and overcome their learned helplessness by developing a sense of control and adopting more adaptive coping strategies.

It is also worth mentioning that learned helplessness is a topic of ongoing research and discussion within psychology, and there may be differing viewpoints on its underlying mechanisms and applications.

What is learned helplessness?

Learned helplessness is a psychological phenomenon that occurs when an individual has learned to believe that they have no control over their circumstances, even when opportunities for control or change are present (Filippello, Harrington, Costa, Buzzai, & Sorrenti, 2018). It is a state of passivity and resignation that arises from repeated exposure to uncontrollable and aversive events.

The concept of learned helplessness was first introduced by psychologist Martin Seligman through his experiments with dogs (Maier & Seligman, 2016). In these experiments, Seligman

subjected dogs to inescapable electric shocks. Later, when given the chance to escape the shocks by jumping over a barrier, the dogs failed to do so, as if they had learned that they were helpless to avoid the shocks. This concept has since been extended to human behavior and is applicable in various domains of life (Funder, Rauthmann, & Sherman, 2020). When individuals repeatedly face situations where they feel powerless and unable to influence the outcome, they may develop a cognitive belief that their actions are futile, and they become passive in their response to subsequent challenges.

Learned helplessness can have significant implications for mental health and well-being (Rizvi & Sikand, 2020). It is often associated with feelings of depression, anxiety, and low self-esteem. Individuals who experience learned helplessness may exhibit a lack of motivation, reduced problem-solving skills, and an increased susceptibility to stress (River, Borelli, Vazquez, & Smiley, 2018). It's important to note that learned helplessness is not a fixed or permanent condition. While the initial experiences may create a sense of helplessness, individuals can overcome it through various interventions. Therapy, cognitive restructuring, building self-efficacy, and providing opportunities for mastery and control can help individuals regain a sense of agency and learn to respond more actively to challenging situations (Meichenbaum, 2017).

Overall, learned helplessness highlights the importance of recognizing the role of personal agency and control in human behavior and the detrimental effects that a perceived lack of control can have on an individual's well-being.

D. Symptoms of Learned Helplessness

While learned helplessness is not a diagnosable disorder, it can manifest through various symptoms and behaviors. Here are five common symptoms associated with learned helplessness: (Wade & Leonard, 2023)

1. Passivity and Inaction: Individuals experiencing learned helplessness often exhibit a passive response to challenging or adverse situations. They may feel incapable of changing their circumstances and, as a result, fail to take action or make efforts to improve their situation.
2. Reduced Motivation: Learned helplessness can lead to a significant decrease in motivation. Individuals may feel that their efforts will not lead to desirable outcomes, resulting in a lack of motivation to pursue goals or engage in activities that require effort.
3. Feelings of Powerlessness: A core aspect of learned helplessness is the perception of powerlessness or a lack of control. Individuals may develop a belief that external forces have complete control over their lives, and their own actions or decisions will not make a difference.
4. Low Self-esteem and Self-worth: Repeated experiences of helplessness can contribute to feelings of low self-esteem and self-worth. Individuals may internalize the belief that they are incompetent or incapable, leading to a negative self-perception.
5. Emotional Distress: Learned helplessness can be associated with increased emotional distress, including symptoms of depression, anxiety, and hopelessness. The perceived lack of control and the belief that outcomes are predetermined can contribute to a sense of despair and emotional turmoil.

It's important to remember that these symptoms are not exclusive to learned helplessness and can overlap with other psychological conditions. Additionally, individual experiences and expressions of learned helplessness can vary. Seeking professional help, such as from a mental health practitioner, can provide a more accurate assessment and guidance for overcoming learned helplessness.

Links with Mental Health Conditions

Learned helplessness is linked with depression, PTSD, and other health problems.

Research indicates that it increases feelings of stress, anxiety, and depression in both humans and animals.

For example, one study on individuals who had experienced domestic violence found that they experienced high levels of fear, potentially leading to learned helplessness that may be preventing them from leaving the abusive situation (Wade & Leonard, 2023).

Consequences of Learned Helplessness

Over time, learned helplessness can impact a person's performance at work or school. In fact, some research suggests that learned helplessness, anxiety, and low perceived self-efficacy could negatively affect performance in specific academic subjects, such as mathematics.

In addition to impairing academic success, students who develop learned helplessness during adolescence may also carry these practices into adulthood. This can influence a person's work life and social and psychological well-being. Learned helplessness may also increase the risk of certain mental health conditions, including depression, anxiety, and PTSD (Wade & Leonard, 2023).

REFERENCES

Bryant, A. R. (2019). Post-traumatic stress disorder: a state-of-the-art review of evidence and challenges. *SPECIAL ARTICLE*, 259.

Burland, J. P., Lepley, A. S., Cormier, M., DiStefano, L. J., Arciero, R., & Lepley, L. K. (2019). Learned Helplessness After Anterior Cruciate Ligament Reconstruction: An Altered Neurocognitive State? *Learned Helplessness After Anterior Cruciate Ligament Reconstruction*, 3-4.

Carnicer, J. G., Calderón, C., & C, D. (2019). Stress, coping strategies and academic achievement in teacher education students. *European Journal of Teacher Education*, 5-9.

Fabio, A. D., Saklofske, D. H., & Stough, C. (2020). The Wiley Encyclopedia of Personality and Individual Differences, Personality Processes and Individuals Differences. In B. J. Carducci, & C. S. Nave, *The Wiley Encyclopedia of Personality and Individual Differences, Personality Processes and Individuals Differences* (p. 271). Hoboken: Wiley Blackwell.

Filippello, P., Harrington, N., Costa, S., Buzzai, C., & Sorrenti, L. (2018). Perceived parental psychological control and school learned helplessness: The role of frustration intolerance as a mediator factor. *School Psychology International*, 371-372.

Funder, D. C., Rauthmann, J. F., & Sherman, R. (2020). *Oxford Handbook of Psychological Situations.* New York: Oxford University Press.

Gagnon, S. A., & Wagner, A. D. (2016). Acute stress and episodic memory retrieval: neurobiological mechanisms and behavioral. *ANNALS OF THE NEW YORK ACADEMY OF SCIENCES*, 55-56.

Gonzalez, A., Peters, M. L., & Orange, A. (2016). The influence of high-stakes testing on teacher. *Cambridge Journal of Education*, 6.

Hori, H., & Kim, Y. (2019). Inflammation and post-traumatic stress disorder. *Psychiatry and Clinical Neurosciences*, 143-145.

Maier, F. S., & Seligman, M. E. (2016). Psychological Review. *Learned Helplessness at Fifty: Insights From Neuroscience*, 8.

Meichenbaum, D. (2017). STRESS INOCULATION TRAINING: A PREVENTATIVE AND TREATMENT APPROACH. *Guilford Pres*, 17-18.

River, L. M., Borelli, J. L., Vazquez, L. C., & Smiley, P. A. (2018). Learning Helplessness in the Family: Maternal Agency and the Intergenerational Transmission of Depressive Symptoms. *Journal of Family Psychology*, 2-3.

Rizvi, Y. S., & Sikand, R. (2020). Learned Helplessness at the Workplace and Its Impact on Work Involvement: An Empirical Analysis. *Global Business Review*, 4.

Wade, D., & Leonard, J. (2023, May 23). *MedicalNewstoday*. Retrieved from MedicalNewstoday: https://www.medicalnewstoday.com/articles/325355

UNIT 14 | MOTIVATION AND REWARDS

Introduction

Motivation and rewards are factors that cannot be ignored in achieving learning goals. Strong motivation can be the main driving force for learning and achieving the desired results, while the right rewards can boost morale and provide recognition for effort and achievements.

In this chapter, we will discuss various aspects of motivation in learning, including intrinsic and extrinsic motivation, the factors that influence it, and strategies for generating and maintaining motivation in individuals. We will also explore various forms of rewards that can be given to increase motivation, as well as provide guidance in selecting and giving awards according to learning objectives.

Through well-structured materials, case examples and interactive exercises, this chapter will provide in-depth insight into the concepts of motivation and reward and their application in learning contexts. You will gain an understanding of how to build a motivating learning environment, identify and leverage the factors that influence individual motivation, and practice effective reward strategies.

We hope that this chapter will provide you with valuable knowledge and empower you to create a learning environment that is motivating, supportive and rewarding accordingly. By applying the principles learned in this chapter, you will be able to optimize engagement and achievement in the learning process.

A. Background

Motivation is an internal or external factor that prompts people to act, take steps, or achieve certain goals. Rewards, on the other hand, are a form of positive reinforcement that result from desired behavior or achievement. The two are related and have a powerful influence on individuals who achieve higher levels of commitment and achievement.

Understanding motivation and reward is crucial in the context of education, work and personal development. Teachers, coaches, managers, and others can use this understanding to develop effective motivational strategies, create a motivating environment, provide appropriate rewards, and encourage continued achievement. Research in psychology, neuroscience, and pedagogy has provided deep insight into the mechanisms of motivation and the impact of rewards on human behavior. For example, theories such as intrinsic and extrinsic motivation theory, reinforcement theory, and expectation theory provide a framework for understanding how motivation and reward influence behavior.

This material aims to provide a comprehensive understanding of the concepts of motivation and reward, and present strategies and practices that can be adopted to increase intrinsic motivation, motivate oneself and others, and provide effective rewards. Designed to This article also explores concepts such as providing constructive feedback, setting measurable goals, and creating environments that foster motivation.

A deep understanding of motivation and reward enables individuals to optimize engagement, performance and satisfaction in many aspects of their lives. The purpose of this chapter is to provide a solid knowledge base and practical skills that can be used to sustainably improve motivation and performance.

B. Short Description

In this chapter there are several sub-chapters that will be discussed related to the title of the material, namely "Motivation and rewards". Some of these sub-sections include:

1. What's the new research on motivation?
2. What causes temporary demotivation?
3. What does brain research tell us about rewards?
4. How can we boost intrinsic motivation?

C. Benefits

1. Increased self-awareness and understanding of personal motivations.
2. Enhanced motivation and proactive approach towards tasks and goals.
3. Improved performance and achievement.
4. Effective leadership and management skills.
5. Creation of positive learning and work environments.
6. Long-term engagement and satisfaction.

By studying this chapter, learners can gain practical knowledge and strategies to enhance motivation, leverage rewards effectively, and create an environment that promotes success and well-being.

D. Learning Objectives

1. What's the new research on motivation?
2. What causes temporary demotivation?
3. What does brain research tell us about rewards?
4. How can we boost intrinsic motivation?

E. Basic Competence

1. Students can find out motivational factors and rewards in the language learning process for students.
2. Students are able to understand what is meant by motivation
3. Students are able to understand what is meant by rewards
4. What are students capable of and the impact of motivation and rewards in the learning process

5. Students are also able to learn various examples of motivation and rewards
6. Students are able to apply motivation and rewards in the language learning process

F. The Subject
1. What's the new research on motivation?
2. What causes temporary demotivation?
3. What does brain research tell us about rewards?
4. How can we boost intrinsic motivation?

G. Materi Description

Temporary Demotivation.

Perhaps they are temporarily demotivated. why? He has three main reasons. The first relates to associations from the past, which can cause a state of negativity or apathy. These memory associations are stored in the amygdala, a

Source: https://www.google.com/url?sa =i&

central brain region. When they are triggered, the brain acts as if the event was happening at that moment.

A teacher's voice, tone, and gestures can sometimes remind students of a previous unpopular teacher. Past failures can trigger such feelings, as can memories of repeated failures in subjects or embarrassing or "catastrophic" failures in class. The second reason is that it's more topical and inherently greener. Students experience inadequate learning styles, lack of resources, language barriers, lack of choice, cultural taboos, fear of embarrassment, lack of feedback, inadequate nutrition, prejudice, inadequate lighting, and seating. You may experience a shortage of Bad temperature, anxiety, etc. Mistakes, rudeness,

irrelevant content, etc. can occur. A third factor that motivates students is their relationship to the future. This includes having clear, well-defined goals (Ford 1992). Also important are the learner's substantive beliefs ("I have the ability to learn this subject") and contextual beliefs ("I have the interests and resources to succeed in this teacher's class"). Any student who falls into any of the three he above categories is simply in a state of temporary lack of motivation. A state is a snapshot of the mind and body. Brain chemical balance, body temperature, posture, eye patterns, heart rate and many other indicators .

How Does the Brain React to Rewards?

Research on rewards and motivation is often associated with the work of psychologist B.F. Skinner talks about operant conditioning in the 1930s. Skinner conducted a variety of experiments with animals that performed simple tasks, such as pulling a lever, in exchange for a reward (i.e., a treat). Of course, humans are a little more complicated than mice. Various studies since Skinner have revealed complex insights into how humans and the brain respond to rewards. Most importantly, scientists have a basic explanation for why rewards work. this answer? A brain chemical called dopamine. What is dopamine and when is it released?As neuroscience professor Robert Saprosky explains in his book Behavior:

The best and worst parts of human biology: Dopamine is a pleasure chemical that is released in the brain in response to pleasurable experiences. Happy juices, sex, music, and food trigger a dopamine response in your brain. "When you show someone a picture of a milkshake after drinking it, dopaminergic activation rarely occurs, but saturation does occur," explains Saprosky. However, further activation occurs in dieting subjects. A diagram of dopamine in the brain in response to milkshakes. In other words, the happiness juice in our brains tells us that what we don't have is more fun than what we just experienced. Receiving rewards is believed to have a positive effect on

motivation. However, in some cases, rewards can actually have a demotivating effect.

Sounds counter-intuitive, right? Large gifts and pay raises can lead to decreased job satisfaction and apathy. Scientific psychology research has studied this theory extensively. One study investigated the effects of rewards and motivation on children. They divided groups of children into her three groups and watched how long they played with colored markers. An activity that most children will enjoy. One group was assigned to play with markers and received a certificate, gold star and red ribbon. Another group receives a reward without being told anything, and a third group receives no reward. About a week later, the same group of children was asked to play with felt-tip pens again. The rewarded group was no longer enthusiastic about playing. The unexpectedly rewarded and unrewarded groups showed similar interest.

Does this mean we shouldn't reward others?

Not quite. This phenomena can be explained in terms of intrinsic and extrinsic motivation.

1. Intrinsic motivation, when the rewards of the activity are for your own interest or enjoyment
2. Extrinsic motivation, when the rewards are outside of the activity. Example money, recognition or praise

Rewards and the Brain

The concept of reward and its effects on the brain are important for understanding human behavior, motivation and achievement (Hodent, 2017). The brain's response to rewards plays an important role in shaping our behavior, emotions and decision-making processes.

Thalamus is a key area of the brain involved in sensory input and self-reward

Prefrontal cortex

Receptor sites for the molecules that trigger pleasure are distributed throughout the body but are concentrated in this "reward circuit"

Dopamine is produced at the top of the brain stem and pushed outward
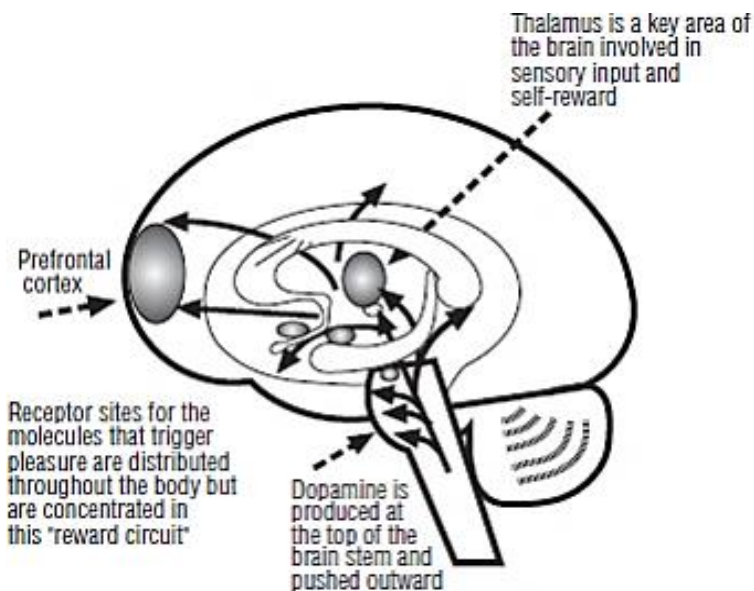
Neuroscientific studies show that reward activates the pleasure and reward centers of the brain, especially the release of neurotransmitters such as dopamine (Sirgy, 2020). This activation forms a positive reinforcement loop, increasing the likelihood of repeating behaviors that lead to reward. The anticipation and experience of receiving rewards can increase motivation, focus, and overall engagement with tasks and activities. Furthermore, the brain's response to rewards varies from person to person. Some people are more sensitive to rewards and experience greater motivation and satisfaction, while others need higher or different kinds of rewards to elicit similar responses. Understanding these individual differences can help us adjust reward systems and incentives to optimize motivation and performance. .

In the 21st century, many parents are trying to introduce a foreign language faster. This introduction began with some experts believing that learning a foreign language, especially English, at primary or preschool age would contribute to successful language learning at the next level. Also, many countries have introduced rewards and punishments in learning

English. Research focuses on the role of reinforcement or punishment in English learning. This study showed that teachers can improve learning through reinforcement and punishment. This study found that different classroom activities can influence reward system success. This study focuses on potential reward use in kindergarten, compared to studies that focused on reward and punishment use in middle school and high school. The study also explores the challenges and efforts of EYL teachers in teaching English in kindergarten. Therefore, this study also focuses on potential reward benefits that motivate EYL students to study English. Many experts, especially linguistic psychologists, have studied how children learn languages for decades. Psycholinguists have studied how children acquire their mother tongue. Research has also begun on how children acquire a second language. But the results were truly astonishing. Some of them argued that there are many similarities in how children acquire first and second languages. Furthermore, some believed that there was no difference between children learning a first language and learning a second language. From this we can conclude that people cannot distinguish between a child's learning process in acquiring a first and second language. Due to many similarities, they divided the young learners into three groups. The first group is children who start pre-school when she is around 3 years old, the second group is children who start primary school when she is 5-7 years old, and the older primary school is when she is 11-12 years old. children graduating from It can occur as early as 14 to 14 years old.

The advantage of early language learning is that young learners have different skills and traits that help them learn a foreign language. Some of the qualities that young learners find very useful in language learning are highlighted. He argues that children can easily pick up new phrases in their native language without knowing the meaning of each word. That way children can get to know a minimal language in an engaging way. This way children can learn without a structured method. Children

may unconsciously learn their native language through everyday activities such as watching cartoons or listening to music. That way, students usually also learn what they find fun. Students have their own ideas. Therefore, it can also help you learn another language. Finally, I learned that children don't have to worry about making mistakes when talking to others. Therefore, children can easily learn and accept new things in the process of learning. The above claims are also supported by other researchers. Children have been found to have better language learning skills than older learners. Children don't want to feel guilty when they make a mistake. (Prawiro & Anggrarini, 2019).

Promoting Intrinsic Motivation

Personality and motivation have been identified as influential variables related to foreign language learning. However, few studies have investigated its impact on oral presentation. This study addresses the importance of both individuality and motivation in student collaboration in oral presentations. 257 students completed the Big 5

Source: https://images.app.goo.gl/GXJ VW3 SEQ Source:_https://images.app.goo.gl/GXJVW3 * ARABIC 1

Personality Traits Questionnaire, which measures extraversion, agreeableness, conscientiousness, nervousness, and openness to experience, and a collaborative research project questionnaire, which measures assignments, project work, and social reinforcement. was evaluated using Learning and social pressure. Overall, the results showed that extraversion, project work, and social pressure were significantly correlated with oral presentation outcomes. The first results suggest that extroverts do better in situations where verbal language production is

243

central to communication. This is especially true for low-achieving students, suggesting that it may compensate for their low extroverted English proficiency. The second shows that the exploratory nature of the task is an intrinsic motivation that extroverts particularly appreciate. The third suggests that the factors that influence student performance are external motivations. These findings extend previous work and highlight the contextual connectivity and occurrence of these affective variables in the context of verbal collaboration. Motivation is an important variable in developmental and educational psychology and is considered an important part of successful language learning. It is also possible that there is a close relationship with the personality of the student. Facilitating motivation therefore depends on a complex and dynamic interplay of cognitive, situational, cultural, personal and social factors. In fact, it reflects that the motivation for language learning is a particularly peculiar situation. (Liang & Kelsen, 2018)

Five main strategies to help students discover intrinsic motivation:

1. The first strategy is to eliminate the threat. It took time and a strong goal, but it's worth it. Some teachers even asked their students to meet the young children. Groups list obstacles to their teaching. You can then discuss ways to mitigate the problem with your group. Use anonymous class surveys to ask which students could use it to make learning more effective and enjoyable.
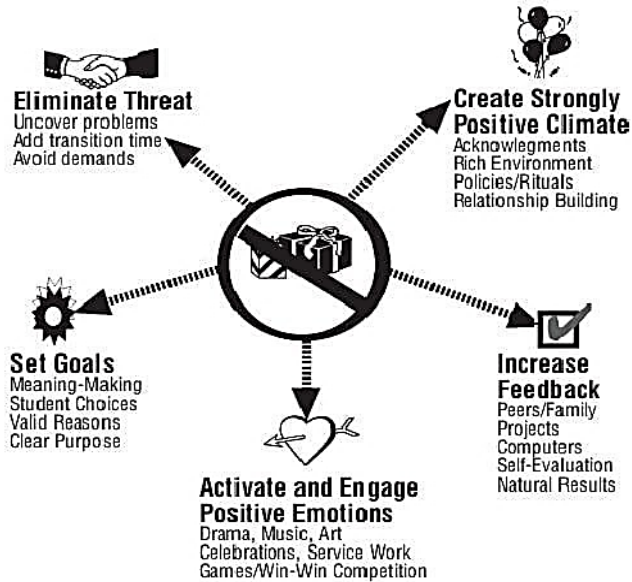
2. Second: set goals (with multiple students).

   choice) can help you get a happier attitude every day. Be prepared to engage students about bullying and personal stories. for example:

   "Today we ambush your body's exercise, nutrition and circulatory highway system in case you get sick. This system is part of the solution to improve it." " This ensures that the content is appropriate for them.

3. Third, by positively influencing yourself in all its aspects, you gain a symbolic and tangible understanding of your students' beliefs about themselves and their learning. This includes the use of affirmations, successful student identification, positive nonverbal attitudes, teamwork, or positive contributions. 4) Fourth, control students' emotions through productive use of rituals, plays, and athletic parties. Teach your students to control their emotions as well.

4. Finally, feedback is he one of the greatest resources of intrinsic motivation. Organize learning so that students can endlessly self-suggest. Computers do this perfectly, as do

245

well-planned projects, workgroups, checklists, plays, colleague and column work.

Supercamp by Eric Jensen and Bobby DE Porter is his 10-day academic shower program for high school students ages 12 through her 22. Many of the students who complete the program have chronic illnesses that drive them down. However, long-term follow-up studies have shown this only after participation. In 10 days, students become voracious learners and improve their grades, attendance and confidence. Super Camp sets an example for schools around the world, showing how children can reach their full potential.

Activities

1. Students are expected to read the material that has been provided to deepen their understanding of this material.
2. After reading the material provided, students are expected to be able to understand what the matrix contains.
3. Students can conduct discussion sessions with teachers or friends regarding the material provided.
4. Students can conclude the results of their discussions in front of the class

Discussion material

In the material it has been explained Motivation and Rewards, discuss it and then present it together with your group regarding your perceptions, is it true that motivation and rewards affecting the learning? If you agree, explain the reasons based on data from the internet or from experience around you.

H. Conclusion

Finally, the motivation and reward materials in this chapter provide valuable insights and practical strategies for understanding and harnessing the power of motivation and reward. By studying this material, learners will gain a deeper understanding of the factors that determine human behavior and the role of intrinsic and extrinsic motivation in achieving goals and promoting engagement. This chapter emphasizes the importance of self-awareness, setting meaningful goals, and creating a positive and supportive environment that fosters motivation. Learners will be armed with practical tools and techniques to motivate themselves, improve performance, and effectively lead and manage others.

Furthermore, this chapter also highlights the importance of intrinsic motivation and the potential downsides of relying solely on external rewards. Learners are encouraged to tap into their natural interests and values, balance goals and personal accomplishments, and foster long-term commitment and satisfaction.

By applying the knowledge and strategies gained in this chapter, learners will be able to optimize their own motivation, inspire and motivate others, and create an environment conducive to success, growth and happiness. . Overall, the Motivation and Rewards material in this chapter provides valuable insight and practical guidance for individuals seeking to be motivated and achieve their goals in various areas of life.

REFERENCES

Aktar, A. (2018). A Critical Study of Psycholinguistics and Language Acquisition Theories. *Scholar Journal of Business and Social*, 1-13.

Hodent, C. (2017). *The gamer's brain.* Boca Raton: CRC Press.

Hu, B., Fan, M., Huang, F., & Zhu, T. (2021). Motivational Tendency Differences Between the Pre-qin Confucianism and Legalism by Psycholinguistic Analysis. *Frontiers in Psychology*, 2-5.

Hussain , M. S., Salam, A., & Farid, A. (2020). Students' Motivation in English Language Learning (ELL): An Exploratory Study of Motivation-al Factors for EFL and ESL Adult Learners. *International Journal of Applied Linguistics & English Literature*, 16-26.

Liang, H.-Y., & Kelsen, B. (2018). Influence of Personality and Motivation on Oral Presentation Performance. *J Psycholinguist Res*, 758.

Prawiro, I. Y., & Anggrarini, N. (2019). An exploration of potential rewards in Rnglish for young learner (EYL) classroom. *WEJ*, 329-330.

Sakka, W., Nasmilah , N., Khan, A., Mumu, S., & Hamidi, B. (2022). Interplay of Teacher Talk and Learners' Motivation in Learning English: A Psycholinguistic Study. *Hindawi Educational Research International*, 2-8.

Sirgy, M. J. (2020). *Positive Balance. A Theory of Well-Being and Positive Mental Health.* Blacksburg: Springer International .

INDEXES

GLOSSARIUM

Cerebrum
Cerebellum
Synapses
Neutral Networks
Biological
Language
Human
Brain
Neurons
Frontal Lobes
Temporal Lobes
Parietal Lobes
Brainstem
Occipital Lobes
Learning
Neuronbiological
Mind
Enabling communique
Cultural transmission
Grey Matter
White Matter
Elements
Engagement

AUTHOR'S BIOGRAPHY

Dr. Ramli, S.S., M. Pd. is currently a lecturer at the English Education Department, Faculty of Teachers Training and Education, Universitas Borneo Tarakan, North Kalimantan, Indonesia. As for his educational background, he accomplished his master's degree in 2012 and the doctorate was pursued at Universitas Negeri Malang (UM) funded by the Indonesian Minister of Research and Technology in 2019. He was also fruitfully awarded a Sandwich Scholarship at The Ohio State University (OSU), Columbus, Ohio, USA, in 2018. He is active in writing research article published in nationally and internationally accredited journals and has written some chapter books, monograph and reference books. He also gets involved as a facilitator in Sekolah Penggerak Batch 3 Kalimantan Utara and an Assessor for BKD (lecturers' workload). Besides, he intensively attends conferences, workshops, and seminars/webinars for continuous professional development. He acquires constructive feedback for his reflection. You can connect with the writer via email at ramli26@borneo.ac.id

Dr. Woro Kusmaryani, S.Pd., M.Pd. is a lecturer at English Education Department, Faculty of Teacher Training and Education, Universitas Borneo Tarakan. She was born on February 6, 1983 in Ngawi. In 2019, she finished her doctoral program in English Education at Universitas Pendidikan Indonesia. She conducts classes on Speaking, Reading, and English for Specific Purposes, and Cross-Cultural Understanding. She is also a member of primary and high school accrediting board in the province of North Kalimantan, as well as the chairman of the center for education, health and gender equality studies at Research Center and Community Services (LPPM) Universitas Borneo Tarakan. You

can connect with the writer via email at worokusmaryani@borneo.ac.id

Dr. Vivit Rosmayanti, S.Pd.I., M.Pd. was born in Botta, June 26, 1987. She has over 10 years experiences teaching pharmacy students at Universitas Megarezky. She obtained a bachelor's degree in English Education from Alauddin State Islamic University. She completed her master and doctoral degree at English Education from Makassar State University. She is currently a lecturer at the Post Graduate Program, Department of English Education at Makassar State University, South Sulawesi, Indonesia. She is also active in writing research article to be published in nationally and internationally accredited journals. She has written in some chapter books, monograph and reference books. She is interested in Teaching Methods in Teaching English. Her research interests include language teaching methodology, ICT instruction, and ESP teaching. She can be contacted at email: vivitoellah@gmail.com.